

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—THE NATURALISM OF HUME (I.).

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"HUME's philosophic writings are to be read with great caution. His pages, especially those of the *Treatise*, are so full of matter, he says so many different things in so many different ways and different connexions, and with so much indifference to what he said before, that it is very hard to say positively that he taught, or did not teach, this or that particular doctrine. He applies the same principles to such a great variety of subjects that it is not surprising that many verbal, and some real inconsistencies can be found in his statements. . . . This makes it easy to find all philosophies in Hume, or, by setting up one statement against another, none at all."¹ The latter is, in effect, what Green has done in his *Introduction to Hume's Treatise*. Green's interpretation of the *Treatise* leads to the conclusion that Hume has no set of positive beliefs, and merely develops to a sceptical conclusion the principles which he inherits from Locke and Berkeley. Nothing exists but subjective mental states, organised by the brute force of association. There is no self, no external world. Hume, Green contends, is more of a subjective idealist than even Berkeley, and so thorough a sceptic that he denounces all belief in permanence, in identity, in activity, whether in the self or outside it, as fiction and illusion. All is change: change governed by no law.

This, however, is now generally recognised as being an unfair statement of Hume's position, and as ignoring all

¹ Selby-Bigge, *Introduction to Hume's Enquiries* (1894 edition), p. vii.

that is most characteristic in his teaching. In answer to Green I may quote the words of another member of the Idealist School: "It is evident that Hume was not lost in the quagmire of subjective idealism. The objective and the subjective are with him akin: the objective is the subjective, which is universal, permanent, and normal. The causal relation has, in the first instance, only a subjective necessity; but through that subjective necessity or its irresistible belief, it generates an objective world. . . . Kant's Hume is therefore a somewhat imaginary being: the product, partly of imperfect knowledge of Hume's writings, partly of prepossessions derived from a long previous training in German rationalism."¹ In these articles I shall try to determine how far, and in what sense, these statements, which Wallace merely makes by the way, and without attempting to justify them by a detailed account of Hume's position, may be regarded as true. My general conclusion will be, that the establishment of a purely naturalistic conception of human nature by the thorough subordination of reason to feeling and instinct is the determining factor in Hume's philosophy; and in order to bring out clearly the significance of this general principle I shall dwell only on the central aspects of his philosophy, omitting, for instance, his views on mathematical science, in which he was not really at home and in reference to which his teaching appears in its least fortunate light. I shall keep almost entirely to his theory of ordinary consciousness and to his theory of morals.

I may begin by considering whether Green is justified in asserting that Hume denies the existence of the external world and of the self. It is still the prevalent view that Hume agrees with Berkeley in the denial of a material world. Hume undoubtedly accepts Berkeley's arguments against the knowability of such a world; and to their number he himself adds another derived from his own philosophy.² Also, though he lays little stress on these

¹ Wallace, *Prolegomena to Hegel's Logic* (2nd edition), chap. viii., pp. 96-97.

² *Treatise*, bk. i., part iv., § ii.; Green and Grose's edition (1874), pp. 499-500; Selby-Bigge's edition (1888), p. 212. Hereafter I shall refer to Green and Grose's edition as 'G,' and to Selby-Bigge's edition as 'S-B.' I assume—the evidence (*cf.* Selby-Bigge's *Introduction to the Enquiries*) seems fairly conclusive—that Hume's philosophy must primarily be judged by the *Treatise*. But I shall make use of the *Enquiries*, and also of the *Dialogues concerning Natural Religion*, when they seem to support or to extend the conclusions come to in the *Treatise*. Hume's philosophy as expounded in these three works seems to me to form, on the whole, a consistent system.

arguments—they are barely mentioned in the *Treatise*—the sufficient reason is that he believes himself to have demonstrated, by his deeper analysis of sense-experience and of reason, that it is impossible by either of these, the only two sources of knowledge, to establish the existence of body. But while thus strengthening Berkeley's position, he denies its relevancy. What we may perhaps describe as the chief aim of Hume's philosophy is to prove that, save as regards those relations upon which the mathematical sciences are based, belief never rests on reason or insight, and that, on the contrary, what we may call synthetic reason is itself merely generalised belief. The assumption of the existence of body is a 'natural belief' due to the ultimate instincts or propensities that constitute our human nature. It cannot be justified by reason, but this unaccountability it shares in common with our moral and æsthetic judgments and with all those theoretical beliefs which concern matters of fact. Green, in ignoring this new doctrine of belief, certainly one of the most essential, and perhaps the most characteristic doctrine in Hume's philosophy, and in regarding Hume as attempting to generate experience out of simple impressions by the mechanism of association,¹ in the manner of Mill and Spencer, misrepresents both the spirit and the letter of Hume's *Treatise*. Green by his close-knit massive argument has certainly succeeded in showing that Hume in developing the line of thought of Locke and Berkeley, reveals the incapacity of their principles to account for experience. But to that general conclusion Hume would in great part agree. His predecessors were, he believed, bound to fail in the establishment of their philosophy;² and this inevitable failure he

¹ "The vital nerve of his philosophy lies in his treatment of the 'association of ideas' as a sort of process of spontaneous generation, by which impressions of sensation issue in such impressions of reflexion, in the shape of habitual propensities, as will account, not indeed for there being—since there really are not—but for there seeming to be those formal conceptions which Locke, to the embarrassment of his philosophy, had treated as at once real and creations of the mind" (*Introduction to the Treatise*, pp. 162-163). In opposition to such statements we must insist that Hume does not regard association as 'explaining' or 'generating' ideas or feelings, but only as stating the conditions under which, as a matter of fact, we find them to occur. The same misinterpretation of Hume's use of association appears in Green's criticism of Hume's doctrine of the disinterested passions.

² Cf. *Enquiry*, § xii., part i.; G., note to p. 127; S-B., note to p. 155. "Most of the writings of that very ingenious author [Berkeley] form the best lessons of scepticism, which are to be found either among the ancient or modern philosophers, Bayle not excepted. . . . That all his arguments, though otherwise intended, are, in reality, merely sceptical, appears from this, that they admit of no answer and produce no convic-

regards as the proof of his own. Their failure leads him, however, not to reject their view of sense—it was not rejected even by Kant—but to criticise their view of the function of reason. We cannot by means of reason explain any of the ultimate characteristics of our experience—the origin of our sensations, the true ‘secret’ nature of causal connexion, apprehension of external reality, appreciation of beauty, judgment of an action as good or bad. And the alternative is not scepticism, but the practical test of human validity. Certain beliefs or judgments (Hume makes no distinction between belief and judgment, or indeed between judgment and reasoning¹) can be shown to be ‘natural,’ ‘inevitable,’ ‘indispensable,’ and are thus removed beyond the reach of our sceptical doubts. “The sceptic . . . must assent to the principle concerning the existence of body, though he cannot pretend by any arguments of philosophy to maintain its veracity. Nature has not left this to his choice, and has doubtless esteemed it an affair of too great importance to be trusted to our uncertain reasonings and speculations. We may well ask, *What causes induce us to believe in the existence of body?* but ’tis vain to ask, *Whether there be body or not?* That is a point which we must take for granted in all our reasonings.”²

Belief in causal action is equally natural and indispensable; and Hume freely recognises the existence of ‘secret’ causes, acting independently of our experience. This causal action shows itself both in the mental and in the natural world. Association is “a kind of Attraction, which in the mental world will be found to have as extraordinary effects as in the natural, and to show itself in as many and as various forms. Its effects are everywhere conspicuous; but as to its causes, they are mostly unknown, and must be resolved into *original* qualities of human nature, which I pretend not to explain.”³ And speaking in the Enquiry of causes in the natural world: “[The really] ultimate springs and principles [of natural operations] are totally shut up from human curiosity and enquiry. Elasticity, gravity, cohesion of parts, communication of motion by impulse; these are probably the ultimate causes and principles which we shall ever discover in nature; and we may esteem ourselves sufficiently happy, if, by

tion. Their only effect is to cause that momentary amazement and irresolution and confusion, which is the result of scepticism.” Italics are Hume’s own.

¹ *Treatise*, i, iii., vii.; G., note to p. 396; S-B., note to p. 96.

² *Ibid.*, i, iv., ii.; G., p. 478; S-B., p. 187. Italics are Hume’s own.

³ *Ibid.*, i, i., iv.; G., p. 321; S-B., pp. 12-13.

accurate enquiry and reasoning, we can trace up the particular phenomena to, or near to, these general principles. The most perfect philosophy of the natural kind only staves off our ignorance a little longer: as perhaps the most perfect philosophy of the moral or metaphysical kind serves only to discover larger portions of it."¹

To turn now to the self. Hume contends that we have no grounds either in experience or in reason for declaring the self to be a simple unchanging substance. Complexity and change are the most prominent characteristics of our human nature. "The identity which we ascribe to the mind of man is only a fictitious one, and of a like kind with that which we ascribe to vegetables and animal bodies."² "In a very few years both vegetables and animals endure a *total* change, yet we still attribute identity to them, while their form, size, and substance are entirely alter'd. An oak that grows from a small plant to a large tree, is still the same oak; tho' there be not one particle of matter, or figure of its parts the same. An infant becomes a man, and is sometimes fat, sometimes lean, without any change in his identity."³ By calling such identity 'fictitious,' Hume, as his comparison of the self with plants and animals would seem to show, does not mean to assert that strictly there is no such thing as an identical self, but only that an absolute constancy is not part of its essential nature. As he indicates in the *Treatise*, all that seems to correspond to this assumed metaphysical constancy is identity of function. In the self, as in a plant or animal, the parts of each conspire to a common end, and this end persists throughout the most radical transformations.⁴ The complexity of the self is as obvious as its changeableness: "Nothing seems more delicate with regard to its causes than thought. . . . A difference of age, of the disposition of his body, of weather, of food, of company, of books, of passions; any of these particulars, or others more minute, are sufficient to alter the curious

¹ *Enquiry*, iv., i.; G., p. 27; S-B., pp. 30-31; cf. *Treatise*, i., iii., v.; G., p. 383; S-B., p. 84: "As to those *impressions* which arise from the *senses*, their ultimate cause is, in my opinion, perfectly inexplicable by human reason, and 'twill always be impossible to decide with certainty, whether they arise immediately from the object, or are produc'd by the creative power of the mind, or are deriv'd from the author of our being. Nor is such a question any way material to our present purpose. We may draw inferences from the coherence of our perceptions, whether they be true or false; whether they represent nature justly, or be mere illusions of the senses."

² *Treatise*, i., iv., vi.; G., p. 540; S-B., p. 259; cf. *ibid.*, G., p. 535; S-B., p. 253; *Dialogues*, vii.; G., pp. 422-423.

³ *Treatise*, *loc. cit.*; G., p. 538; S-B., p. 256.

⁴ *Loc. cit.*

machinery of thought, and communicate to it very different movements and operations. As far as we can judge, vegetables and animal bodies are not more delicate in their motions, nor depend upon a greater variety or more curious adjustment of springs and principles."¹

Our belief, then, in the identity and unity of the self, like our belief in an external world, though determined for us by nature, cannot be justified by reason. The ultimate nature of the self cannot be known, and on theoretical grounds no abiding personality can be proved. But so far from denying the existence and reality of the self, Hume seeks—like Kant, though in a very different manner—in its ultimate constitution, in its propensities, instincts, feelings, and emotions, the explanation of all experience, whether theoretical or practical. "Tis evident, that all the sciences have a relation, greater or less, to human nature; and that however wide any of them may seem to run from it, they still return back by one passage or another."² It is the capital or centre of all knowledge, and once masters of it we can extend our conquests over all those sciences which intimately concern us. "In pretending, therefore, to explain the principles of human nature, we in effect propose a complete system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security."³

¹ *Dialogues*, part iv.; G., p. 408. It may be noted how Hume, spite of his speaking of the self as a 'bundle or collection' of distinct impressions, constantly compares it with organisms, with the unity of a plant, of an animal, of society. Cf. *Treatise*, i., iv., vi.; G., p. 542; S-B., p. 261. "I cannot compare the soul more properly to anything than to a republic or commonwealth, in which the several members are united by the reciprocalities of government and subordination, and give rise to other persons, who propagate the same republic in the incessant changes of its parts. And as the same individual republic may not only change its members, but also its laws and constitutions; in like manner the same person may vary his character and disposition, as well as his impressions and ideas, without losing his identity. Whatever changes he endures, his several parts are still connected by the relation of causation. And in this view our identity with regard to the passions serves to corroborate that with regard to the imagination, by the making our distant perceptions influence each other, and by giving us a present concern for our past or future pains or pleasures." Hume's analysis of the self is unfairly treated when contrasted only with that of Kant, and not rather, as it ought to be, with the views of Locke and Berkeley. On the fundamental point, that the self is not to be described as a simple substance, Kant is in agreement with Hume. When Hume states that the self is *for us* (the limitation is important and should always be noted) only a 'bundle or collection' of perceptions, he is overstating his position in opposition to the equally one-sided view of his opponents.

² *Treatise*, Introduction to bk i.; G., p. 306; S-B., p. xix.

³ *Ibid.*; G., p. 307; S-B., p. xx.

Many difficulties in the way of this interpretation of Hume's position will at once suggest themselves, especially as regards his frequent and very confusing use of the words 'fiction' and 'illusion' in reference to causality, and material body, but consideration of these difficulties I shall defer until I have more completely stated what I regard as being Hume's actual position. As I have already pointed out, Green seems to hold that Hume's principles are all borrowed from Locke and Berkeley, and that his philosophy may be adequately regarded as simply the consistent and thorough development of their fundamental principles. There is, however, much positive teaching in the *Treatise* which is not to be found anywhere in the writings of his predecessors; and his philosophy is throughout inspired by a new conception of knowledge which is in many respects identical with Kant's Copernican idea. This new conception of the nature of experience and of the function of reason has already been indicated, and, if explicitly formulated, would run as follows. The function of knowledge is not to supply a metaphysic, but only to afford us guidance in practical life. If we are content to regard our beliefs as the outcome of the ultimate propensities that constitute our human nature, they can be shown, in their perfect fitness to the calls which things make upon us, to be as wonderfully adapted as any of the animal instincts; but if, on the other hand, we wrongly insist on interpreting them as the conclusions of supposed inferences, they will be found to rest on a mass of contradictions and of theoretically unjustifiable assumptions. Even when philosophers reinterpret the ordinary consciousness, modifying this or that belief, so as to attain a consistent system, they merely create additional beliefs, which, while they do not stand the test of practical life, still continue to contain "all the difficulties of the vulgar system, with some others, that are peculiar to themselves".¹ Hume is thus no sceptic as to the powers of reason, but quite positive that its sole function is practical. The question that has primarily to be decided is not how the fundamental characteristics of experience are to be rationally explained, but what function rational insight can have in our lives. That can only be discovered by observation of the facts, and as man is essentially an active being, these are above all else those of morals. Hume therefore fitly adds as sub-title to the *Treatise* which contains his whole philosophy, that it is "an attempt to introduce the experimental method of reasoning into

¹ *Treatise*, i., iv., ii.; G., p. 499; S-B., p. 211.

moral subjects".¹ Reason is not the guide to action, but, quite the reverse, our ultimate and unalterable tendencies to action are the test of practical truth and falsity. Reason, he contends, is nothing distinct from our natural beliefs, and therefore cannot justify them. His attitude in ethics—that "reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them"²—has its exact counterpart in his theory of knowledge. "Giving a different turn to the speculations of philosophers," Hume seeks to establish "a system or set of opinions, which if not true (for that, perhaps, is too much to be hop'd for) [may] at least be satisfactory to the human mind, and [may] stand the test of the most critical examination."³

That this is really Hume's conception of the function of reason, and that it leads to a genuinely fresh conception of the nature and conditions of experience, will best be shown by a brief account of the main argument of the *Treatise* and *Enquiry*. But before doing so, I must state the two very distinct meanings which he ascribes to the term 'reason'. "All reasonings may be divided into two kinds, demonstrative reasoning, or that concerning relations of ideas, and moral reasoning, or that concerning matter of fact and existence."⁴ The first kind of reasoning is analytic. Since the relations discovered are involved in the ideas compared, being such as cannot be changed without change in the ideas, their truth is guaranteed by the law of non-contradiction. The relations thus revealed are those of resemblance, contrariety, degrees in quality, and proportions in quantity or number; and as the mathematical sciences of geometry, algebra, and arithmetic, involve only such relations, they are rendered possible by such discursive analytical thinking. "That three times five is equal to the half of thirty, expresses a relation between these numbers. Propositions of this kind are discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe. Though there never were a circle or triangle in nature, the truths demonstrated by Euclid would for ever retain their

¹ Hume uses the term 'moral' in a very broad sense.

² *Treatise*, ii., iii., iii.; G., p. 195; S-B., p. 2.

³ *Ibid.*, i., iv., vii.; G., pp. 551-552; S-B., p. 272.

⁴ *Enquiry*, iv., ii.; G., p. 31; S-B., p. 35. This broad use of the word 'moral' is explained by Hume's view of our knowledge as determined throughout by practical considerations, and as possessing no absolute metaphysical truth.

certainty and evidence."¹ This logical necessity, which consists in the impossibility of conceiving the opposite, is the sole form of rational necessity known to us, and it supplies a standard in the light of which we are enabled to detect its complete absence from all our knowledge of matters of fact. When we seek by means of inference to extend our knowledge of real existence, we make use of certain non-rational synthetic principles which can only be explained as blind instinctive propensities of the human soul. And as this second, synthetic, form of reasoning embraces all knowledge outside mathematics (for even the present testimony of sense and the records of memory involve synthetic principles), it is much the more important, and Hume constantly equates it with reason in general. Reason, he roundly declares, is "nothing but a wonderful and unintelligible instinct in our souls": though it may justify itself by its practical uses, it can afford no standard to which objective reality must conform. "There is no room in mind for any synthetic operation. Analysis Hume admits, but not synthesis. . . . What is called Necessity of Reason, if it does not mean the impossibility because contradictoriness of the opposite (and that is only analytical), has no objective significance; it is merely the expression for a tendency in mind; it is only subjective: 'necessity is something that exists in the mind, not in objects'."²

So long as we move about within experience, determining the nature of our given ideas and their discoverable interrelations, analytical thinking with its absolute standard enables us to gain true and certain knowledge. Experience is, however, conditioned by what lies outside it;³ and as there is no transition, by way of analytical thinking, to these external conditions, they control the mind from without by a merely brute necessity. Through feeling and instinct they determine the mind both in thought and in action. "Nature by an absolute and uncontrollable necessity has determined us to judge as well as to breathe and feel."⁴ "All these operations [judgment as to matters of fact, appreciation of beauty, estimation of an action as good or bad] are a species of natural instincts, which no reasoning or process of the thought and understanding is able, either to produce, or to

¹ *Enquiry*, iv., i.; G., pp. 21-22; S-B., p. 25.

² Adamson, *Development of Modern Philosophy*, i., pp. 143-144.

³ This, I should hold, is Hume's implied, though not always fully expressed, point of view.

⁴ *Treatise*, i., iv., i.; G., pp. 474-475; S-B., p. 183.

prevent."¹ Hume has even attempted in the *Treatise* to bring the knowledge of relations into line with this account of empirical reasoning. All ideas are simple and relationless. They do not compare, but are as they are; and hence in them lie no relations. "The necessity which makes two times two equal to four, or three angles of a triangle equal to two right ones, lies only in the act of the understanding by which we consider and compare these ideas."² This view of mathematical reasoning is, however, inconsistent with Hume's previous account of arithmetical reasoning,³ and its falsity is virtually admitted by him when he distinguishes between 'philosophical' and 'natural' relations. As Green has so clearly shown, it is precisely in his failure to consider what is involved in the discursive comparing activity of reason that the weakness of his system lies. Had he realised the problems which are involved in our consciousness of relations, in our apprehension of succession quite as much as in the apprehension of causality, he would never have attempted to completely separate analytic and synthetic thinking. He would have recognised that the same problems are involved in both. That he did completely separate them, and that he ascribed to analytical thinking a quite secondary rôle is, however, undoubted. He could not attempt to prove that there is no such thing as rational necessity (for consciousness of it is implied in the proof of its absence); but postulating it in a form for which he could not really account, he seeks to show that owing to the constitution of our experience it cannot be attained in any department of our knowledge of matters of fact. Natural belief takes the place of rational insight.

In the brief summary which I shall now give of Hume's main argument in the *Treatise* and *Enquiry*, my chief aim will be to state the grounds of his naturalistic view of reason, and to show how his philosophy of knowledge culminates in a new theory of belief.⁴ I shall first take up Hume's demonstration of the practical value and theoretical irrationality of the ordinary consciousness, and his complementary proof

¹ *Enquiry*, v., i.; G., p. 40; S-B., pp. 46-47.

² *Treatise*, i., iii., xiv.; G., p. 460; S-B., p. 166.

³ *Ibid.*, i., iii., i.; G., p. 374; S-B., p. 71. According to this passage, in arithmetical reasoning we possess a standard of perfect precision and certainty, and in applying it we reason according to the constitution of the numbers compared. And even in geometry, though, on Hume's view, we have no such exact standard, we still reason in accordance with the given sensible appearances.

⁴ The reader who is familiar with Hume's argument may omit the first part of the summary.

of the practical worthlessness and equal irrationality of the philosophical reinterpretation of it. Thereafter I shall try to show the close connexion between his theory of knowledge and his ethical teaching.

The fundamental assumption involved in ordinary consciousness, that there is permanence and identity in things, is an excellent example of what is in practice an indispensable belief, and yet is incapable of theoretical justification.¹ The vulgar regard their perceptions as the real things, and therefore as continuing to exist while unperceived, and as remaining identically the same even when they have undergone change. Now we have only to close our eyes to annihilate our perceptions, and as the perceptions that appear on opening them again are new perceptions, separated from the old by an interval, no proof can possibly be offered that they are the same and have existed throughout the interval. As we know nothing but the distinct perceptions, the assertion of their identity merely on the ground of their resemblance must be purely dogmatic.² That, however, is but one defect; there is no contradiction involved, such as we find in the further assertions that each thing is a unity and abides throughout all change. Take the classical instance of a piece of wax. The wax is for us nothing but an aggregate of distinct sensations of smell, sound, taste, touch, and sight; and yet we none the less regard it as a single thing. Also though, when placed before the fire, it in melting loses all its previous qualities, and acquires other and different attributes, we still regard it as remaining the same identical piece of wax. That is apparently the inevitable procedure of our minds, and the result is the union of absolute contradictories. For the thing, which is admittedly a compound or aggregate, is hereby asserted to be one and simple, and that which undergoes transformation to remain the same and identical.

What then, Hume asks, are the causes which make us fall into these evident contradictions? Reason (taken in the ordinary sense) cannot be the force at work, for besides that its whole aim is to avoid self-contradiction, it also demands evidence, and, as we have just seen, none can be obtained. It is here, as elsewhere, a 'blind and powerful instinct,' that, demanding no evidence, and ignoring theoretical inconsistency for the sake of practical convenience, necessitates belief.

¹ *Treatise*, i., iv., ii.

² I am concerned only to state Hume's actual position and do not seek either to defend or to criticise it. His philosophy rests on the fundamental assumption that the mind can immediately experience only subjective mental states.

Take, first, the belief in identity throughout change. If we observe the gradual changes in the wax when it is put before the fire and melts, at no point is there a break, but throughout the whole process, whereby it entirely changes its outward appearance, the mind is led on through a series of such slight and imperceptible alterations, each change preparing it for a still greater change that follows, that the passage of the mind from first to last is smooth and uninterrupted. The gradual changes accordingly leave a *feeling*¹ of sameness or identity of function in the mind, and this subjective feeling is the sole ground we have for asserting an objective identity in the real objects. Yet owing to the mind's instinctive tendency to spread itself over external objects, and to ascribe to them any feeling they occasion, it is a ground which constrains the mind to believe in the identity of the object throughout all change. Similarly the diverse sensations constituting the wax are so closely associated, no one of them appearing in the mind without immediately dragging the others into consciousness in its train, that the feeling of their mental union inevitably gives rise to the belief in their objective unity.

The philosophers, observing these palpable contradictions, have only made bad worse by seeking rational justification for them. Finding none in what is experienced, they fall back on fiction, feigning a something which they name substance, behind the sensible qualities and distinct from them, and which they suppose to be simple and unchangeable. In this way, as they believe, the contradictions can be removed, the unity and identity being ascribed to the substance, the change and multiplicity to its states. But the evidence for this philosophical theory (and the demand for evidence cannot in this case be avoided, since it is for the satisfaction of reason that it is propounded) is no greater than what exists for the popular doctrine, namely, a subjective feeling in the mind and not any real connexion perceived to hold within or between objects.² The philosophers have simply doubled the sensible reality which alone is known, and as the second reality is purely fictitious they are perfectly free to imagine it as will best suit their purposes and cover contradictions. And the assumption of the existence of such substances, besides being incapable of proof, is also useless. As Hume shows

¹ Cf. note to p. 161.

² Hume's detailed and very subtle proof of this statement I must omit. It is primarily directed against Locke and Berkeley, and would, from their point of view, be very difficult to meet. This whole section (bk. i., part iv., § ii.) is, as Mr. Selby-Bigge remarks, perhaps the most interesting part of the whole *Treatise*.

in reference to Locke and Berkeley, not a single one of the old difficulties is thereby solved. The problem is only pushed back, to reappear, on deeper reflexion, in an uglier form. "By this means [the feigning of occult substances] these philosophers set themselves at ease, and arrive at last, by an illusion, at the same indifference, which the people attain by their stupidity, and true philosophers by their moderate scepticism."¹

Hume accounts in a similar manner for belief in the self as an abiding existence. Our ideas are so closely united one to another through the bonds of association, that the easy passage of the imagination along the ideas generates the *feeling* of identity, and this subjective feeling in the mind is again interpreted as denoting actual identity of existence. This belief in the permanence of the self performs an indispensable function in our practical life, and from it, therefore, we cannot desire to free ourselves. But this practical function is its sole function, and upon it no metaphysic of the soul can be based.

All such attempts, however, to give theoretical explanation of what can only be practically justified, rest rather on the principle of causality than on the conception of substance. For it is always this principle that is appealed to, when the right to assert an abiding substance is called in question or when its relation to the sensible is sought. As the causal relation holds between distinct and separate events, it affords another, and equally important, example of a relation that can neither be demonstrated as necessary by reason nor verified as actual in experience. Hume's familiar argument in support of this position need not, however, be stated. The one point that I need dwell upon is the determining influence which he assigns to feeling. Though we have no knowledge, rational or empirical, of causal action, we are yet, as practical life demands, firmly convinced of its existence. And here again it is a blind but powerful instinct that apart from all evidence irresistibly inclines the mind to this belief. When ideas have been constantly conjoined they become mentally associated, so that on the presentation of one the mind (through the workings of that unknown force, association) is necessitated to call up the idea of the other. This determination of the mind, this feeling of necessitated transition, is the original of our idea of necessity, causal efficacy and power.² Necessity is something that is

¹ *Treatise*, i., iv., iii.; G., p. 510; S-B., p. 224.

² Some critics seem to hold that Hume has no right to any such feeling. Certainly Hume cannot pretend to be able to explain *how* the feeling is

felt in the soul, not perceived to hold between objects; and it is due to that fortunately irresistible instinct which leads us to spread ourselves on external objects and to ascribe to them any internal impression which they occasion in us,¹ that our belief in the causal agency of objects and in the personal activity of the self is independent of reasoning and victoriously withstands all the objections that can be raised by reflexion. Only for moments, when we turn away from practical life, can we free ourselves from this belief that we directly apprehend necessary connexion and real activity; and only thus, from this detached philosophical point of view, can we recognise that their real nature can never by any possibility be discovered. The conceptually empty and unmeaning notion of causation is only of practical use within experience, never valid as an instrument for the metaphysical explanation of that experience.

But one of the most important points in Hume's criticism still remains to be stated. Even if we take the term 'cause' as signifying only the customary antecedent, no *inference* to a cause can ever, in any single case, even within experience, be theoretically justified. All that experience has revealed is conjunction in the past, and the inference to similar conjunction in future cases goes upon the assumption that the future will resemble the past. "If there be any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless, and can give rise to no inference or conclusion. It is impossible, therefore, that any arguments from experience can prove this resemblance of the past to the future; since all these arguments are founded on the supposition of the resem-

generated, but that does not deprive him of the right to learn from experience that it is, as a matter of fact, generated. His view of reflexion must be kept in mind. Just as we learn from experience that the idea of pain or pleasure, when it returns upon the soul, is followed by the new impression of desire and aversion, hope and fear, which may therefore be called impressions of reflexion, so also experience teaches us that after events have repeatedly succeeded one another there arises in the mind a feeling of necessitated transition from the one to the other. But the generating causes of this feeling like the generating causes of our sensations, can never be discovered. Hume adds in the *Enquiry* (vii, i; G., note to p. 56; S-B., note to p. 67) that what is called the feeling of effort, resistance, or animal *visus*, also forms part of the vulgar conception of causal activity. But since this also is pure feeling, it affords to the mind no *knowledge*, that is, *comprehension* of the nature of activity, and indeed is not, save through customary connexion, capable even of indicating its existence. All feeling is in itself blind and unilluminating, and therefore can indicate nothing.

¹ *Treatise*, i, iii, xiv.; G., p. 461; S-B., p. 167.

blance."¹ No sufficient evidence existing for the inference, it must be the outcome of some unreasoning propensity, and that propensity is custom or habit. "For wherever the repetition of any particular act or operation produces a propensity to renew the same act or operation, without being impelled by any reasoning or process of the understanding, we always say, that this propensity is the effect of *Custom*. By employing that word, we pretend not to have given the ultimate reason of such a propensity. We only point out a principle of human nature, which is universally acknowledged, and which is well known by its effects."² This custom by leading us to anticipate the future in accordance with the past, and so to adjust means for the attainment of our ends, brings about the required harmony between the course of nature and the succession of our ideas. "Those, who delight in the discovery and contemplation of *final causes*, have here ample subject to employ their wonder and admiration."³

But in this 'custom' something more must be involved than has yet come to light, for the ideas introduced by it are, as we say, 'inferences,' and not mere suggestions. "If flame or snow be presented anew to the senses, the mind is carried by custom to expect heat or cold, and to *believe* that such a quality does exist, and will discover itself upon a nearer approach."⁴ It would, Hume remarks, be quite allowable to stop our researches at this point, taking custom as a natural propensity of the soul conditioning belief; but, as it happens, we can carry our inquiries a step further. The distinction between a fictitious idea and one that is believed cannot lie in any peculiar idea, such as that of 'reality' or 'existence,' that is annexed to the one and absent from the other.⁵ "For as the mind has authority over all its ideas, it could voluntarily annex this particular idea to any fiction, and consequently be able to believe whatever it pleases; contrary to what we find in daily experience."⁶ It follows, therefore, as the sole alternative, that the difference between fiction and belief lies in some sentiment or feeling that accompanies all ideas believed. And to verify that conclusion Hume suggests an experiment. "If

¹ *Enquiry*, iv., ii.; G., p. 33; S-B., pp. 37-38.

² *Ibid.*, v., i.; G., p. 37; S-B., p. 43.

³ *Ibid.*, v., ii.; G., pp. 46-47; S-B., p. 55; cf. v., i.; G., p. 39; S-B., pp. 44-45.

⁴ *Ibid.*, v., i.; G., p. 40; S-B., p. 46.

⁵ Cf. *Appendix to the Treatise*; G., p. 555 ff.; S-B., p. 623 ff.

⁶ *Enquiry*, v., ii.; G., p. 41; S-B., pp. 47-48.

I see a billiard ball moving towards another, on a smooth table, I can easily conceive it to stop upon contact. This conception implies no contradiction; but still it feels very differently from that conception by which I represent to myself the impulse and the communication from one ball to another."¹ Belief superadds nothing to the content of an idea but only changes our manner of conceiving it, rendering it more vivid, forcible and steady, and so causing it to weigh more in the thought, and to have a superior influence on the passions and imagination. All these characteristics we find in a supreme degree in our perceptions; and since perceptions are, apart from inference or evidence, the immediate objects of belief, this view of belief, as being nothing but such vivid and steady apprehension, may be taken as proved.

Perceptions have, however, a further characteristic. As the facts show, they possess the power of conferring upon any ideas that are in any way connected with them a share of their vivacity. Memory-images carry the mind through a connected series of images direct to its present perceptions, and being enlivened by them, take stronger hold upon the mind than does the idea, say, of an enchanted castle. The picture of an absent friend enlivens our idea of him, and also every feeling which that idea occasions. For the same reason the superstitious are fond of the relics of saints and holy men. Now this quality of our perception would also seem to be the cause of belief in an effect suggested by a present perception. The perception of fire conveys to the suggested idea of heat a share of its liveliness, and the idea thereby approximating in force to an impression, the mind necessarily believes in its existence.

Inference, then, instead of being based on the relation of cause and effect and presupposing it, is itself identical with that relation. It is nothing but the custom-bred transition from an impression to an enlivened idea. Just as in his ethics Hume grounds the distinction between moral good and evil not on reason but on certain emotions and passions which are to be found in every man, and which constitute the constant element in human nature; so here in his theory of knowledge he declares the operation of the mind, by which we infer effects from causes, to be, like that of moral judgment, so essential to the subsistence of all human creatures, that it cannot be trusted to the fallacious deductions of our reason. "It is more conformable to the ordinary wisdom of nature

¹ *Loc. cit.*

to secure so necessary an act of mind, by some instinct or mechanical tendency, which may be infallible in its operations, may discover itself at the first appearance of life and thought, and may be independent of all the laboured deductions of the understanding."¹ "Nature by an absolute and uncontrollable necessity has determin'd us to judge as well as to breathe and feel."² "All these operations are a species of natural instincts, which no reasoning or process of the thought and understanding is able, either to produce, or to prevent."³ And, as his whole philosophy is directed to prove, reason can as little explain as control them.

This new theory of belief is the indispensable complement of Hume's new view of the function of knowledge, and was all-important in determining his philosophical attitude. By his predecessors belief had been regarded as purely intellectual, dependent on insight, and therefore at the mercy of the philosophical sceptic; whereas, if Hume's teaching is true, it does not result from knowledge but precedes it, and as it is not caused by knowledge, so also is not destroyed by doubt.⁴ By the fortunate construction of our nature, "the conviction, which arises from a subtle reasoning, diminishes in proportion to the efforts, which the imagination makes to enter into the reasoning, and to conceive it in all its parts. Belief, being a lively conception, can never be entire, where it is not founded on something natural and easy."⁵ As the mind departs further and further from its ordinary attitude, sinking itself in ideas, "tho' the principles of judgment, and the balancing of opposite causes be the same as at the very beginning; yet their influence on the imagination, and the vigour they add to, or diminish from the thought, is by no means equal."⁶ Thus happily, "nature breaks the force of all sceptical arguments in time, and keeps them from having

¹ *Enquiry*, v., ii.; G., p. 47; S-B., p. 55.

² *Treatise*, i., iv., i.; G., pp. 474-475; S-B., p. 183.

³ *Enquiry*, v., i.; G., p. 40; S-B., pp. 46-47.

⁴ "Shou'd it be here asked me . . . whether I be really one of those sceptics, who hold that all is uncertain, and that our judgment is not in *any* thing possess of *any* measure of truth and falsehood; I shou'd reply, that this question is entirely superfluous, and that neither I, nor any other person was ever sincerely and constantly of that opinion. Nature, by an absolute and uncontrollable necessity has determin'd us to judge as well as to breathe and feel. . . . Whosoever has taken the pains to refute the cavils of this *total* scepticism, has really disputed without an antagonist, and endeavour'd by argument to establish a faculty, which nature has antecedently planted in the mind, and render'd unavoidable." — *Treatise*, i., iv., i.; G., pp. 474-475; S-B., p. 183.

⁵ *Ibid.*; G., p. 477; S-B., p. 186.

⁶ *Ibid.*; G., p. 476; S-B., p. 185.

any considerable influence on the understanding".¹ They cannot overthrow our natural beliefs without totally destroying our human nature.

Further, all sceptical doubts as to the validity of our natural beliefs rest, not on the demonstration of the falsity of these beliefs, but only on the proofs of the total absence of evidence for them. It is therefore only one possibility against another, and, in our complete and necessary ignorance as to the nature of ultimate reality, all sceptical arguments against trust in these particular beliefs must equally diminish trust in our sceptical doubts. The appeals to reason for and against natural belief mutually destroy one another "till at last they both vanish away into nothing, by a regular and just diminution".²

But that does not make an end of our difficulties, for the natural beliefs which we perforce follow, themselves mislead us. And this brings us to the second stage in Hume's argument, his proof, namely, that the philosophical reinterpretation of experience is worthless in practical life, and besides containing all the contradictions of ordinary consciousness possesses in addition certain difficulties peculiar to itself. The philosophical reinterpretation that he has specially in view is the spiritualism and consequent deism of Descartes and his English successors. This line of thought I have already touched upon in stating Hume's criticism of the category of substance, and may now consider it more at length. What we call 'reason,' and oppose to our natural beliefs, is in reality nothing distinct from these beliefs; and it is just the *de facto* necessity we are under of following them, which gives rise to the philosophical or 'rational' reaction against them. The understanding is nothing but the imagination acting according to its most general and established habits or instincts;³ and it is because these

¹ *Treatise*, i., iv., i.; G., p. 478; S-B., p. 187.

² *Ibid.*; G., p. 478; S-B., p. 187.

³ *Ibid.*, i., iv., vii.; G., p. 547; S-B., p. 267; cf. i., iii., xvi.; G., p. 471; S-B., p. 179. "To consider the matter aright, reason is nothing but a wonderful and unintelligible instinct in our souls." The completeness with which Hume equates reason and instinct, and gives a purely naturalistic explanation of both, is well illustrated in the following passage from the *Dialogues*, vii.; G., pp. 422-423: "These words, *generation, reason*, mark only certain powers and energies in nature, whose effects are known, but whose essence is incomprehensible, and one of these principles, more than the other, has no privilege for being made a standard to the whole of nature. . . . In this little corner of the world alone, there are four principles, *Reason, Instinct, Generation, Vegetation*, which are similar to each other, and are the causes of similar effects. What a number of other principles may we naturally suppose

instincts, when theoretically developed, conflict with one another that the understanding is at variance with itself.¹ Our two most fundamental beliefs are, first, that the objects we perceive have an independent substantial reality, and secondly, that nothing can come into existence save through a pre-existent cause. Now in acquiescing in the first belief we fly in the face of all the inevitable consequences of the causal postulate. This Hume contends has been proved by Berkeley. When we reason from cause and effect we conclude that neither colour, sound, taste, nor smell have independent reality, and when we exclude all these nothing of all that we apprehend remains as real existence. Thus though no abstract arguments drawn from the universal application of the one belief can destroy the other, the necessity of holding both must prevent us from ever being satisfied with either.² Hume's argument is primarily directed only against the position of Locke and Berkeley, but it is the same line of thought that it so fruitfully developed in the Critical philosophy. We cannot without self-contradiction acquiesce in our natural belief in the independent reality of the world apprehended through sense-experience.

Again, it is these natural beliefs that induce idle speculation. The belief in causal connexion being instinctive is

in the immense extent and variety of the universe, could we travel from planet to planet and from system to system, in order to examine each part of this mighty fabric? . . . Reason, in its internal fabric and structure, is really as little known to us as instinct or vegetation; and perhaps even that vague, undeterminate word, *Nature*, to which the vulgar refer everything, is not at bottom more inexplicable." But though Hume in describing the understanding as nothing but the imagination acting according to its most general and established habits, certainly means to emphasise that it is in essence instinctive and contains no objective standard to which reality must conform, he must not be taken as implying that it is therefore identical with imagination in the ordinary sense, and is a source of arbitrary fictions. The imagination constitutes the deepest element in our human nature, and fulfils the same function as Kant's faculty of understanding: it creates the order of nature out of the detached impressions of sense. "In order to justify myself, I must distinguish in the imagination betwixt the principles which are permanent, irresistible, and universal; such as the customary transition from causes to effects, and from effects to causes: And the principles, which are changeable, weak, and irregular. . . . *The former are the foundation of all our thoughts and actions, so that upon their removal human nature must immediately perish and go to ruin.*"—*Treatise*, i., iv., iv.; G., p. 511; S-B., p. 225. Italics are mine. Hume ascribes an equally important function to imagination in the creation of mathematical science.

¹ We may compare Hume's line of argument with that of 'the Prussian Hume,' the all-destroyer.

² Hume's detailed proof is too lengthy to be given. Cf. *Treatise*, i., iv., iv.; *Enquiry*, xii., i.

unlimited in its pretensions, and leads us, in the pursuit of knowledge, to demand a sufficient cause for all things. But since we have no adequate conception what would be a 'sufficient' cause—Hume further develops this point in his *Dialogues*—either for the world as a whole or for any phenomenon in it, this demand can never be satisfied. In demanding, however, explanation of all things, reason also requires justification for its own demands, and as these rest on blind instinct, for which no theoretical justification can be given, it here again demands the impossible. The demand for 'sufficient' causes is itself insufficiently caused, and in thus insisting on itself it finally brings to light its purely practical function and its non-rational source.

We must, then, draw the 'sceptical' conclusion, that though our natural beliefs are our sole guides they are reliable and legitimate only in practical life. We must limit our inquiries to 'the experienced train of events'. "Nothing else can be appealed to in the field, or in the senate. Nothing else ought ever to be heard of in the school, or in the closet. The more sublime topics are to be left to the embellishment of poets and orators, or to the arts of priests and politicians." "Those who have a propensity to philosophy will still continue their researches; because they reflect, that, besides the 'immediate pleasure attending such an occupation, philosophical decisions are nothing but the reflexions of common life, methodised and corrected. But they will never be tempted to go beyond common life, so long as they consider the imperfection of those faculties which they employ, their narrow reach, and their inaccurate operations.'" ¹

But this is a more sceptical conclusion than is strictly demanded by Hume's philosophy. Hume in these and similar passages seems to imply that no really definite and final set of opinions can be arrived at. As he says in the *Treatise*,² we must study philosophy in a 'careless manner,' and be as diffident of our sceptical doubts as of our philosophical convictions. On his own showing, however, reason (in its synthetic form) is as necessary as natural belief. It is true that if we seek to reject natural belief in favour of reasoning we are really only rejecting belief in the independent existence of our impressions for belief in their causal dependence—a belief which leads to equally self-contradictory results. But it is also true that if we condemn all

¹ *Enquiry*, xii., iii.; G., p. 133; S-B., p. 162.

² *Treatise*, i., iv., vii.; G., p. 552; S-B., p. 273.

refined reasoning, that is to say, all application of the synthetic principles of imagination beyond the sphere of immediate experience, we run into the most manifest contradictions. In either case we entirely subvert the human understanding.¹ The more consistent conclusion would therefore be, that though reason cannot take the place of natural belief, still less overthrow it, its generalising powers are yet necessary for its interpretation and control. Only through the use of our natural beliefs as universal synthetic principles can we discover their limited range and their merely practical worth. This more positive view of the relation of reason to feeling and instinct is also more in agreement with the conclusion which, as we shall see, Hume comes to in his ethical philosophy.²

I may now, before passing to Hume's theory of morals, consider the difficulties involved in his use of the terms 'illusion,' 'fiction,' 'propensity to feign,' in reference to our notions of body and of causation.³ Hume's argument rests throughout on the supposition that perishing subjective states are the only possible objects of mind, and that it is these perishing states which natural belief constrains us to

¹ *Treatise*, i., iv., vii.

² Hume's view of the relation between natural belief and synthetic reason may profitably be compared with the very different, though analogous, opposition of understanding and reason in the Critical philosophy. Just as reason discovers the contradictions involved in the conceptions of understanding when universalised, so reason reveals the contradictions involved in our natural beliefs when these are regarded as theoretically true. Also, while Kant shows reason to be helpless apart from understanding, Hume proves reason to be incapable of acting apart from natural belief. And lastly, to complete the analogy, just as Kant's ideas of reason are simply the categories freed from all limitations, so reason is for Hume nothing but our natural beliefs universalised. It is because, when thus universalised, they conflict and lead to insoluble contradictions that we are forced to recognise their purely practical aim. I do not, of course, mean to imply that the views of Hume and of Kant are really akin. Each gives so different a meaning to reason that the tendencies of their systems are quite divergent. The following passage from the *Prolegomena* brings out in a striking manner Kant's agreement with Hume, but is a very inadequate statement of Kant's real position. "The principle of all genuine Idealists, from the Eleatic school to Bishop Berkeley, is contained in this formula, 'All knowledge by sense and experience is nothing but mere appearance, and truth is to be found only in the ideas of pure understanding and reason'. The principle which throughout governs and determines my Idealism is: 'All knowledge of things from pure understanding or pure reason is nothing but mere appearance, and truth is to be found only in experience'." — *Werke* (Hartenstein), iv., p. 121.

³ As regards the reality of the self, I have already stated (pp. 153, 154, 161 above) all that seems necessary; but Hume's argument as to the reality of material body may be taken, *mutatis mutandis*, as also true of the self.

regard as abiding independent existences. Such belief is obviously, on the above interpretation, sheer illusion and utterly false.¹ It is due to a propensity to feign. Belief in the existence of body does not, however, necessarily involve this identification of the external world with the world perceived. The philosophical theory postulates the double existence of objects and perceptions; and to an objective world, thus conceived as distinct from our fleeting impressions, the terms fiction and illusion cannot be applied. For if the existence of such a world cannot be asserted, just as little can it be disproved. Philosophers, however, though they have sufficient force of genius to free themselves from the vulgar error, have not sufficient insight to keep them from seeking to justify their own theory at the bar of reason. "However philosophical this new system may be esteemed, I assert 'tis only a palliative remedy, and that it contains all the difficulties of the vulgar system, with some others, that are peculiar to itself."² Though "it pleases our reason, in allowing, that our dependent perceptions are interrupted and different; and at the same time is agreeable to the imagination, in attributing continued existence to something else, which we call objects," it presupposes the popular theory, and derives all its authority from it. Apart from that theory it can offer no grounds for itself, and therefore can never really displace natural belief by rational judgment.³

Now Green, besides ignoring Hume's doctrine of natural belief, misrepresents his position by taking the epithets which concern only the popular theory as applying also to the philosophical. As we have just seen, Hume's utterances from the one point of view are not inconsistent with those from the other. Though the popular belief is an illusion and demonstrably false, the philosophical view, in some one or other of its forms, may be true though it can never be established. And this is all that is required in order to turn the scales in favour of our natural beliefs. They may contain genuine truth though the particular form in which they

¹ In my account of Hume in *Studies in the Cartesian Philosophy* (chap. vi., especially pp. 247-248, 251-252), I have followed the current view more closely than I am now prepared to do. It was quite impossible for Hume to adopt the position which he suggests in the *Treatise* (i., iv., ii.; G., pp. 495-496; S-B., pp. 207-208). An interpretation of this passage, similar to that which I have given in my *Studies*, and open therefore to the objections which I have indicated above, has recently been presented in an interesting manner by Dr. Montague (*Philosophical Review*, January, 1905—"A neglected point in Hume's philosophy").

² *Treatise*, i., iv., ii.; G., p. 499; S-B., p. 211.

³ Here again I can only summarise Hume's argument.

exist is obviously false. The form which they take is influenced by practical convenience, and theoretical consistency is not, therefore, an indispensable condition of their practical truth. The illusions upon which they rest may the better fit them for their immediate end. And since reason is as incapable of correcting as of displacing them, we must accept them in the crude form in which they result from the instinctive equipment of the human mind. Hume candidly admits that such inquiries raise doubts even in his own mind as to the validity of those natural beliefs which he contends to be unavoidable.¹ But this he regards as simply one illustration of how all reflection upon ultimate questions must inevitably lead to uncertainty and doubt. Such philosophical inquiries are both useless and harmful, except in so far as they lead us to detect the inherent impossibility of all metaphysical construction and so constrain us to resign ourselves to our natural beliefs. "Tis impossible upon any system to defend either our understanding or senses; and we but expose them farther when we endeavour to justify them in that manner. As the sceptical doubt arises naturally from a profound and intense reflexion on these subjects, it always increases, the farther we carry our reflexions, *whether in opposition or conformity to it*. . . . An hour hence he will be persuaded there is both an external and an internal world."²

It is, however, in reference to causation that Hume's most ambiguous statements are made. Inference, instead of being based on the relation of cause and effect, and presupposing it, is itself identical with that relation. "Necessity is something, that exists in the mind, not in objects; nor is it possible for us ever to form the most distant idea of it, consider'd as a quality in bodies."³ "The efficacy or energy of Causes . . . belongs entirely to the soul. . . . 'Tis here that the real power of causes is plac'd along with their connexion and necessity."⁴ Before commenting on these passages I may point out that Hume states as strongly as Green himself the objection to this position which at once

¹ *Treatise*, i., iv., ii.; G., p. 504; S-B., p. 217. "I began this subject with premising, that we ought to have an implicit faith in our senses, and that this would be the conclusion I shou'd draw from the whole of my reasoning. But to be ingenuous, I feel myself *at present* of a quite contrary sentiment, and am more inclined to repose no faith at all in my senses, or rather imagination, than to place in it such implicit confidence."

² *Ibid.*; G., p. 505; S-B., p. 218. Italics are mine. Cf. *Enquiry* xii. i.; G., p. 127; S-B., p. 155.

³ *Ibid.*, i., iii., xiv.; G., p. 460; S-B., pp. 165-166.

⁴ *Loc. cit.*

suggests itself, namely, that it entirely reverses the natural order of thought and reality, and contradicts the assumption which Hume himself inevitably makes at every turn, even in his proof that we can have no genuine conception of causal agency. "What! the efficacy of causes lie in the determination of the mind! As if causes did not operate entirely independent of the mind, and wou'd not continue their operation, even tho' there was no mind existent to contemplate them, or reason concerning them. Thought may well depend on causes for its operation, but not causes on thought. This is to reverse the order of nature, and make that secondary, which is really primary."¹ Hume's answer to this objection shows very clearly that he does not mean to deny the objective reality of material bodies or their mutual influence. "I can only reply to all these arguments, that the case is here much the same, as if a blind man shou'd pretend to find a great many absurdities in the supposition, that the colour of scarlet is not the same with the sound of a trumpet, nor light the same with solidity. If we have really no idea of power or efficacy in any object, or of any real connexion betwixt causes and effects, 'twill be to little purpose to prove, that an efficacy is necessary in all operations. We do not understand our own meaning in talking so, but ignorantly confound ideas, which are entirely distinct from each other. I am, indeed, ready to allow, that there may be several qualities, both in material and in immaterial objects, with which we are utterly unacquainted; and if we please to call these *power* or *efficacy*, 'twill be of little consequence to the world. *But when, instead of meaning these unknown qualities, we make the terms of power and efficacy signify something, of which we have a clear idea, and which is incompatible with those objects, to which we apply it, obscurity and error begin then to take place, and we are led astray by a false philosophy.*"²

In the next sentence, however, Hume states his position in an ambiguous manner that goes far to account for the common misunderstanding. He proceeds: "This is the case, when we transfer the determination of the thought of external objects, and suppose any real intelligible connexion betwixt them; *that being a quality, which can only belong to the mind that considers them*."³ Unless that last sentence is carefully interpreted in the light of its context, the words which I have italicised may seem to involve a conclusion

¹ *Treatise*, i., iii., xiv.; G., pp. 461-462; S-B., p. 167.

² *Ibid.*; G., p. 462; S-B., p. 168. Italics in last sentence are mine.

³ *Loc. cit.* Italics are mine.

which there is nothing at all in Hume's argument to support, and which moreover is in flagrant contradiction with the admissions which he has just made. All that it really says is that causal connexion denotes for us merely a feeling, the feeling of necessitated transition, and that *this, quâ feeling*, can exist only in mind. This, I should contend, is the point of view from which the sentences which I have quoted above, in the beginning of the previous paragraph, must be interpreted. Reading their context this seems quite obviously to be their meaning. To take the strongest of his assertions: "The efficacy or energy of causes is neither plac'd in the causes themselves, nor in the deity, nor in the concurrence of these two principles; but belongs entirely to the soul, which considers the union of two or more objects in all past instances. 'Tis here that the real power of causes is plac'd along with their connexion and necessity."¹ Now what Hume has here in view is the explanation of our causal inferences. The foundation of such inference is the *de facto* transition from cause to effect, arising from repeated union. This transition is in no wise due to the objective nature of either the cause or the effect, but solely to their acquired mental connexion. "The necessity or power, which unites causes and effects, lies in the determination of the mind to pass from the one to the other."² Hume's whole meaning, therefore, is that the connexion and necessity *which ground our inferences* can only exist in us; and this does not involve the assertion that objects are incapable of influencing one another independently of mind.

¹ *Treatise*, i., iii., xiv.; G., p. 460; S-B., p. 166.

² *Loc. cit.* This is the sentence immediately preceding that which we are now considering.

(To be continued.)

II.—HAS MR. MOORE REFUTED IDEALISM?

BY C. A. STRONG.

READERS of Mr. Moore's 'Refutation of Idealism,' in *MIND*, N.S., No. 48, cannot fail to have been impressed with its extraordinary merit. Whether we judge it to be successful or not in its main contention, it is certainly a very searching examination of the principles on which Idealism rests. No previous critic of the theory, so far as I know, has gone to work in so minute and logical a manner, or produced so lucidly reasoned and self-consistent an argument. It behoves the Idealist to ask himself whether he can in any way escape from the fine-meshed net which Mr. Moore throws out for him. I think he can, provided his Idealism be of a certain type. And I am emboldened to set forth my reasons for this view by the two facts, first, that I find that this type of Idealism shields me from some of Mr. Moore's most vigorous blows, and, secondly, that I do not recoil from certain rather startling consequences of the theory which Mr. Moore indicates, towards the close of his article, as being the true consequences of Idealism.

I.

Mr. Moore undertakes to show that the principle '*esse = percipi*' is false in all the senses that have ever been attached to it. It seems to me a most serious omission that he should not have discussed the application of this principle to our mental states. For almost every one admits that the *esse* of our mental states is *percipi*—that they exist only by our being conscious of them. What would a pain, for instance, be that no one was conscious of? Or a desire that nobody felt? Mr. Moore takes the case of the sensation of blue, and endeavours to prove that the sensation is distinct from the blue and that the blue is the object of the sensation. Would he hold, in the same way, that pain is distinct from and the object of our consciousness of it? And would he argue, as he does in the case of the blue, that

the pain may continue to exist after the consciousness of it ceases?

Paradoxical as it may seem, I believe if he should argue thus he would not be wholly wrong. For by the consciousness of pain I think we usually mean a double fact. There is the pain itself as a mere feeling, and there is a certain amount of thought about it. I rarely experience a pain without saying to myself, What a disagreeable feeling this is, and asking myself what I can do to remove it; or, at the very least, I dimly note its local relations to other parts of the body. In other words, I transform it into an object of thought. But the pain must first exist as a mental fact, as a state of sentiency, before thoughts about it can arise. Possibly in the minds of the lower animals the feeling of pain may exist alone, without giving rise to any thoughts; but in the mind of man I think the experience of every one will bear him witness that they are pretty uniformly present.

Now, the suggestion I would offer is that, when we contrast a pain with our consciousness of it, the fact we refer to by the 'consciousness' is these supernumerary thoughts. We feel ourselves to be *other than* the pain, because we identify ourselves with the thoughts, and the thoughts are really and truly other than it. Indeed, this appears quite plainly when we consider that the pain they are about is, strictly speaking, not the pain that coexists with them but the pain of a moment before, or the pain up to a moment before. We feel ourselves to be *dealing with* the pain, because the thoughts are really and truly about the pain. Thus that by which the pain is present, and that by which it is an object of thought or consciousness, are two distinct mental functions. By the first of these functions the pain exists as a part of our mental being; by the second we are able to deal with it as a relatively external and foreign thing. This external dealing with it is in no way necessary to the pain's existence; subtract the consciousness in this sense, and the pain still remains. But if by the consciousness you mean the feeling, you cannot subtract that without the pain going too.

If the foregoing suggestion be correct, it explains why we have so strong a tendency to think that the *esse* of our mental states is *percipi* or *sentiri*, in the passive. Mr. Moore quite correctly points out that the true sense in which the Idealist should show things to be mental is *percipere* or *sentire*. (And this, moreover, is the type of Idealism to which I referred at the beginning, and which I consider to be proof against Mr. Moore's objections—I agree that his arguments make short work of the other.) But among the

supernumerary thoughts which our mental states arouse are those by which we introspectively observe and study them. To observe a mental state is not to turn a searchlight of intuition upon it that did not illuminate it before, to become conscious of something of which we before were unconscious, but to attend to it in such a way as to permit it to call forth a certain specific kind of thought. The mental state observed exists no otherwise (except for the attentive reinforcement) than when we were not observing it; it simply calls forth this kind of thought. Now, at the very moment when we are engaged in thus attending to and thinking about a mental state, it is hardly to be wondered at if we fancy the objective relation in which it temporarily stands to our thought to be essential to the mental state's existence. We have never met with mental states, as psychologists, except when they were our objects; consequently we fancy their essence is to be our objects. This, of course, is a case of the 'psychologist's fallacy'. Mr. Moore is perfectly right in correcting it and in insisting on the Realistic view of introspection. The existence of the mental state is, as he says, entirely independent of the intellectual consciousness by which we reflectively apprehend it. But the existence of the mental state is by no means independent of consciousness in the sense of feeling.

What the Idealist really means, then, when he asserts that the esse whether of material objects or of mental states is percipi in the passive, is the double fact that they exist as feelings and are thought about. Idealism is indefensible as an account of the relation between either material objects or mental states and our thoughts about them. But it seems to me to be correct in its assertion that material objects, like mental states, exist as feelings.

II.

But let us come back to the feeling of pain. I can hardly imagine that Mr. Moore would seriously attempt to distinguish between pain and the feeling of it. And yet this is what he is committed to by his theory that consciousness is in all cases a perfectly colourless, abstract, unqualified thing, and that what many writers call its 'content,' and what might better be called its quality, is in reality its *object*. I will venture therefore to point out the difficulties in which he would involve himself by the attempt to carry through such a doctrine.

On the one hand, since the pain is known through the consciousness but is not dependent on it for its existence,

we have to ask ourselves in what shape and with what sort of nature we may conceive it to exist after the consciousness of it is withdrawn. And the mere statement of the question is sufficient to indicate its utter unanswerability. On the other hand, the difficulty of understanding how the pain can exist has its counterpart in the difficulty of understanding how the consciousness can be known. According to Mr. Moore's principles, consciousness is our evidence of the existence of things—not that by which they exist. Very good. We are conscious of the pain: hence we know that it exists. But we are not and cannot be, at the moment at least, conscious of the consciousness: hence we have no evidence that it exists, and our assertion of its existence, and of the presence of the pain to it, seems baseless. If it be said that we learn of its existence the moment after, I point out that at that moment it no longer exists: consequently the consciousness of it cannot be immediate, cannot be intuitive, but must be of the nature of memory. But how can we have memory of that which we have never experienced? In short, if it were true that the pain exists originally, not as a mode of feeling, but as an object of consciousness, that is a truth the knowledge of which we could not legitimately have come by. The theory is therefore self-destructive.

Of course I am far from denying that there is a function of mind by which we have knowledge of things other than our states of consciousness, and even of things that never were or by any possibility could be states of our consciousness at all (and of this function of *thought* I shall say more in the sequel). But my point is, that it is absurd to suppose that our first tidings of the existence of our states of consciousness themselves come to us in this representative manner. On the contrary, we never could have representative knowledge either of our states of consciousness or of anything else if we were not in some way immediately acquainted with our states of consciousness, if they were not *experienced* or *present*, at the moment of their existence—if, in other words, there were not a mental function of *feeling* distinct from that of *thought*. These will be familiar considerations to readers who have occupied themselves with the question of the 'Pure Ego'; but I see no evidence in Mr. Moore's paper that he is aware his Realism involves all the difficulties of Prof. Ward's theory of the Subject, and is open to the objections which Mr. Bradley has so effectively urged against that theory, especially in his article 'A Defence of Phenomenalism in Psychology,' in *MIND*, N.S., No. 33.

We must not overlook, however, the two rather striking passages in which Mr. Moore lets us see what would probably be his attitude towards the second of the above-mentioned difficulties. These passages are so important that I will quote the principal sentences. On p. 446 he tells us—discussing the question, it is true, with reference to the sensation of blue—that the element of consciousness in the sensation is “extremely difficult to fix. . . . That which makes the sensation of blue a mental fact seems to escape us; it seems, if I may use a metaphor, to be transparent—we look through it and see nothing but the blue.” And again on p. 450: “The moment we try to fix our attention upon consciousness and to see *what*, distinctly, it is, it seems to vanish: it seems as if we had before us a mere emptiness. When we try to introspect the sensation of blue, all we can see is the blue: the other element is as if it were diaphanous”.

In considering these passages, we must bear in mind that they do not refer to the mere experience or sensation of blue, as distinguished from introspective knowledge of it—Mr. Moore does not mean to say that in the mere experience or sensation the element of consciousness appears diaphanously. Such a view would be in patent contradiction with his theory. For his theory is that the object of consciousness is always other than the consciousness, and it is impossible therefore that the consciousness should at the same time be its own object, or in any way aware of itself. In the mere experience the element of consciousness is not diaphanous, it is wholly invisible. Mr. Moore's passages refer rather to the way in which consciousness appears when we try to observe it introspectively, and for the first time become conscious of it. And they involve a peculiar theory of the nature of introspection. The introspective consciousness by which we apprehend a sensation is not conceived as *subsequent* to the sensation, for this again, on his theory, would involve an absurdity: we should be dealing in memory with that which we had never experienced. A mental state that was invisible at the moment when it existed cannot emerge into visibility by the very process by which it ceases to be. Mr. Moore's idea is rather that the introspective consciousness and the mental state which it observes are *simultaneous*—that the introspection catches the mental state, as it were, in the act. The mental state lasts, that is to say, a certain length of time; during the first part of its existence we form the design of introspectively observing it, and when this design is fully formed it is put into execution upon the portion of the mental state which then continues to exist. There are

thus in introspection two parts, so to speak, to our consciousness: on the one side the sensation, say, of blue, and on the other side the consciousness of this sensation, the consciousness of the consciousness.

Now, I am not concerned to deny that our consciousness may be thus complex, that there may be two parts to it each with its own object: on the contrary, I should conceive this view to be borne out by the facts. But what I feel sure of is that *the second part of our consciousness never refers to or has cognitively to do with the first part of our consciousness, but always with the consciousness of an earlier moment.* And, in proof of this, I can only repeat the statements already made in regard to the nature of introspection. To observe a mental state—a pain, for instance—is not to bring forth a second mental state that intuits or reduplicates the first, as if the pain were not sufficiently present to us by the mere fact of its existing; but to think about it in a certain way. And the thoughts that constitute such introspective observation have to be called forth by the mental state in order that they may be true of it. This is a process taking place in time, and having the necessary result that the introspective thoughts are later than the mental state to which they refer. We have only to consider the matter from the physiological point of view to see that this must be so. The processes of our thinking run parallel with processes in the brain; one brain-process must call another forth in order that that other may be logically related to or explicative of it; and, if one calls the other forth, the two cannot be simultaneous. I conceive that physiological and comparative psychology bear with their whole weight in favour of this view.¹

The introspective consciousness is necessarily subsequent, then, to the mental state with which it has to do; and it cannot legitimately have to do with it unless the mental state was *experienced*, or in some way immediately given, at the moment of its existence. Deny that the mental state was experienced, that the element of consciousness was given in and with the quality, at that moment, and it becomes a thing which we have no means of entering into relations with or making the acquaintance of at all.

In short, Mr. Moore's whole theory rests on the proposition that what we are conscious of (not merely in the sense

¹ Cf. Prof. Stout's account of what it is to think of a sensation as such, *Analytic Psychology*, vol. i., p. 44, and Prof. James's treatment of introspection, *Principles of Psychology*, vol. i., pp. 189-190. Is not Mr. Moore employing his uncommon logical powers upon the basis of an insufficient psychology?

of thought, for which the proposition would be perfectly true, but in that of feeling), is always other than the consciousness, that our consciousness of things is to be sharply distinguished from the things themselves; and it now appears that this conception has only the single slight flaw, that you cannot explain, consistently with sound views of introspection, how you ever learned there was such a thing as the consciousness. The truth is that you never did learn it, and that there is no such thing as consciousness in this sense. The consciousness of blue, as something over and above the actually given blue—unless you mean by it the supernumerary thoughts referred to above—is a pure fiction, an hypostatisation of the fact that the blue is capable of becoming an object of thought. *La conscience n'existe pas*, says a French writer¹—that is, as something over and above the actually given thoughts and feelings that compose our minds. As a name for the totality of those thoughts and feelings, it is of course existent enough.

III.

I must assume that I have now established, as against Mr. Moore, the existence, side by side with the function of thought, of a function which we may call feeling; the difference between the two being this, that by the function of thought we are made aware of things other than the consciousness of them, while in feeling we are immediately aware of the concrete nature of the feeling itself. I must now attempt, by means of a doctrine which I think most fair-minded persons will admit to be simply inevitable in the case of an experience like pain, to construe the difficulties which Mr. Moore has so ingeniously pointed out in the case of sensation.

When Mr. Moore distinguishes between blue and the consciousness of it, it seems to me that the contrast he primarily has in mind is that between blue as an immediate experience and certain thoughts which he has about it, but which are by no means necessarily present in the mind of every person who experiences blue. If we examine what is the nature of these thoughts, I think we find the most im-

¹ Quoted in James's *Principles of Psychology*, vol. i., p. 305 note. I have not been able to look up the passage, but from the context in which it is cited the meaning would appear to be as indicated. Since the above was written, Prof. James has definitely maintained the thesis in question in an article in the *Journal of Philosophy* for 1st September, 1904, entitled 'Does "Consciousness" Exist?' the standpoint of which is essentially that of the present paper, and to which I am glad to be able to refer the reader.

portant and fundamental among them to be of two kinds: there are those by which the blue is conceived as part of the physical world, as in a certain vaguely felt spatial relation to my body, as the quality of a more or less permanent physical object; and there are those by which it is thought of as belonging to the train of experiences which constitutes my mind. In other words, the 'consciousness' of the blue is the consciousness of its relations to other things. But there is another contrast, of an entirely different character, which I think co-operates with this one to produce our confused impression that blue is one thing and the consciousness of it another. This is the contrast between blue as merely conceived, without reference to the fact of its being actually given or not, and blue as actually given—a logical, now, as distinguished from a psychological contrast. We are able to think of blue when it is not actually given, and therefore, even when it is given, we are able to think of it in abstraction from the fact of its givenness. The givenness thus comes to seem a separate fact, added on to the blue itself. It is the confused sense of this double contrast, as it appears to me, which is at the root of our common-sense conviction that the blue first exists and then, by an external act of the mind, is experienced or perceived.

If this be the correct account of the matter, then, in the simple experience of blue, there is no ground whatever for opposing the blue to the experience and considering the former to be the object of the latter. The relation of subject and object exists only where there is thought. In simple sensation or feeling, the quality is the concrete description of the nature of the awareness, as the awareness is the mode of existence of the quality. I do not say that the quality is the 'content' of the awareness, for I do not know what 'content' in such a case would mean. The word 'content' is a convenient one to use where we wish to indicate that a particular thought or feeling is present with others in the mind, and so forms a part but not the whole of the momentary field of consciousness. The thought or feeling is then in a true sense *contained* within that field. But if only a single thought or feeling were present, I do not know in what sense its quality could be said to be the 'content' of its awareness. The expression would imply an unreal separation between the two and a sort of subject-object relation between them, and so be only a subtle way of contradicting oneself. I think we must hold that the quality is neither the object nor the 'content' of the awareness, but simply the description of its nature.

But why, in that case—to come to another of Mr. Moore's difficulties—do we hesitate to speak of a 'blue awareness'? I think for the following reasons. In the first place, by 'awareness' we are wont to understand intellectual rather than sensational consciousness, and we know very well that blue can only be the *object* of the former. Secondly, we are accustomed to predicate colours of physical objects, and the phrase a 'blue feeling' consequently suggests that the feeling is an object which can be seen. Indeed, to speaking of a 'painful feeling' we have no similar objection. And, even in the case of the blue, you have only to insert a hyphen, and make it a 'blue-feeling' or a 'blue-sensation,' for all difficulties to be miraculously removed. So true is it that our instinctive sense recognises blue to be a mode of experience or consciousness.

One of the cleverest things in Mr. Moore's article is the "kind of antinomy" (p. 442) by which he seeks to prove that the experience of a colour is distinct from the colour itself as a given fact. I will quote his statement of it. "(1) Experience is something unique and different from anything else; (2) Experience of green is entirely indistinguishable from green: two propositions which cannot both be true." Of course Mr. Moore will admit that if the particular thing on whose uniqueness and difference from everything else we were insisting was *existence*, the word 'existence' might be substituted for 'experience' in the above passage without creating any such antinomy. For, as Kant has told us, existence is not a real predicate, and a hundred dollars in my mind are entirely indistinguishable from a hundred dollars in my pocket. But to prove that experience is the same thing as existence is of course the whole difficulty for the Idealist. We seem, however, to have succeeded at least in proving that the existence of a pain is the same thing as the experience of it, and for this special case therefore the antinomy disappears: (1) Feeling is something unique and different from anything else; (2) Feeling of pain is entirely indistinguishable from pain—two propositions between which I do not think even Mr. Moore will discover any incompatibility. And, if we have succeeded in showing that blue is, like pain, essentially a mode of feeling or experience, then the antinomy would disappear in the case of blue as well.

In short, the force of the antinomy seems to depend on an ambiguity in the first proposition by which the Idealist is made to admit something opposed to his fundamental doctrine. Almost every one will allow that feeling or con-

sciousness is "unique and different from anything else" in this sense, that there is a respect in which blue and red, or blue, sour, and hot, agree, and a respect in which they differ; as almost every one will allow that existence is unique and distinct from anything else in the same sense. That is, we mean something definite by the word. But the antinomy has force only on the supposition that the other things from which consciousness differs—pain, for example—can exist, so to speak, unmixed with consciousness,¹ or can be considered without consciousness being seen to be necessarily implied in them. That consciousness is necessarily implied in pain we see at a glance. That it is necessarily implied in green or blue, we see, I think, after a little reflexion. Consciousness is "unique" in the sense that it is distinguishable from everything else, but it is not unique in the sense that other things can be conceived without consciousness being implied in them or that consciousness can be conceived as a particular existence side by side with other things.

IV.

I think I have now perhaps dwelt sufficiently on the case of sensation to show how I should endeavour to meet Mr. Moore's arguments, and on what grounds I should base my contention that, so far as sensation is unaccompanied by thought, we are not aware in it of anything distinct from our own states of mind. But I have expressly admitted and

¹ This phrase, written before seeing Prof. James's article 'Does "Consciousness" Exist?' (*Journal of Philosophy*, 1st Sept., 1904), would certainly seem to lay me open to the charge of holding the 'menstruum' theory of consciousness which he there condemns; and yet I think not with justice. For I conceive the quality and the consciousness to be two aspects, not two parts, of the whole which they form; and in this whole I recognise no inner duality. The relation of these two aspects is like that of quality and intensity as characters of sensation, which do not imply any duplicity in the sensation itself. Similarly, the 'experiences' of which Prof. James speaks may vary in quality—red, cold, sweet, houses, animals—or they may vary in that character which constitutes the introspective *fact* in attention and which psychologists call 'clearness'. *In virtue of this last mode of variation we speak of them as facts of consciousness.* Consciousness is therefore a line of variation, or dimension, of all 'experiences' whatever (indeed, I do not know what else we mean by calling them 'experiences'); they do not *become* facts of consciousness by a subsequent process, by being put together or thought about in a certain way, but they are so inherently. Moreover, it is the line of variation by which they exist or fail to exist. In this psychological sense, then, consciousness is the most fundamental of facts. It is only as an entity distinct from all concrete experiences and cognitive of them that I understand Prof. James to deny its existence.

insisted that there is also a function of thought by which we are aware of things distinct from our own states, and the question arises how these two functions are to be reconciled with each other, which of them is the more original and fundamental, and whether it is possible to maintain that feeling in no way looks beyond itself without being shut up in a similar subjectivism in the case of thought. The difficulty presents itself thus: If what is present to the mind in feeling is simply the concrete nature of the feeling, thought too, being in one aspect a psychic existence or mode of feeling, must have a concrete nature which is immediately present to the mind in the same way as the concrete nature of the feeling is, and how then shall the *object* of the thought be present also? The concrete nature of the thought seems to rise like an emanation and shut out the object of the thought from view. Or, to use a different figure, a rivalry springs up between the object of the thought and its 'content' or quality, to determine which of the two shall be present to consciousness, and it seems that on Idealistic principles the 'content' or quality must win the day, with the result of a pure subjectivism.

I offer Mr. Moore my sincere compliments on the admirable lucidity with which he has worked out (p. 452) the seemingly subjectivist consequences of Idealism. He sees, I am convinced, more correctly than many of its professed champions what the Idealistic theory really involves. Only he is mistaken in supposing that these consequences are so extravagant that no one would care to maintain them. With a little interpretation that does not alter the fundamental sense, the Idealist may accept every word he says, and rejoice to find a fellow-philosopher who, though a Realist, sees the logic of the question as he sees it himself.

Let me quote Mr. Moore's passages: "But, if so, then, when any Idealist thinks he is *aware* of himself or of any one else, this cannot really be the case. The fact is, on his own theory, that himself and that other person are in reality mere *contents* of an awareness, which is aware of nothing whatever" (p. 452). Take the words "awareness," "aware of," here in the sense of what is immediately felt or experienced as distinguished from what is signified or represented, overlook the fact that signifying or representing may be entitled to be called 'awareness' in another sense, and this is a perfectly accurate statement of implications of a theory of cognition which Prof. James first, to my knowledge, set forth in an article in *MIND* for 1885 on 'The Function of Cognition,' and the subjective side of which—the very side

which Mr. Moore brings out with such clearness in the foregoing passage—was enunciated, not as a paradox but as an evident truth, by Dr. Dickinson S. Miller in an article in the *Philosophical Review* for 1893 called 'The Meaning of Truth and Error'.¹

The fact that we are not aware of, (in the sense of immediately experiencing) that of which we think, is perhaps most clear where what we think of is another person's mind. We have a state of consciousness which is immediately given and which stands to us as a symbol of his mind, but that that state of consciousness and the mind which it symbolises are not only numerically different but widely unlike each other in quality is, I should say, sufficiently evident. I find it difficult to believe that Mr. Moore means seriously to maintain the *intuitional* view of our knowledge of other minds which would seem to be suggested by his remark (p. 451) that Idealists "hold for instance that they are sometimes aware of other minds, which continue to exist even when they are not aware of them"—as if the relation of our consciousness to other minds when we think of them were not *toto coelo* different from its relation to material objects when we perceive them, the latter being *present* and the former *absent*. But now, the case of other minds is the type of all cases of objects of thought: *whatever is thought of is eo ipso absent and merely represented, and never in any case given as an immediate experience. Nothing can be given as an immediate experience except modifications of the knowing consciousness itself.* We seem to *intuite* our own subjective existence merely because the thought of it follows immediately upon and is separated only by a hair's breadth from the experience. But the only way to be *really* (i.e., not merely representatively) aware of ourselves is to have (= be) the thoughts and feelings in which our being consists. In the same way, we seem to *intuite* material objects and yet to be distinct from them merely because the thought of them (that which constitutes our consciousness that they are material objects) follows directly upon the sensations in which their being consists.²

¹ I have given an account of this theory, and suggested certain modifications and additions which it seems to require, in an article entitled 'A Naturalistic Theory of the Reference of Thought to Reality,' in *Journal of Philosophy*, 12th May, 1904. Prof. James's latest statement of it will be found in his article, 'A World of Pure Experience,' *Journal of Philosophy*, 29th Sept., 1904.

² Though I do not hesitate in the text to identify material objects with our sensations, the general argument of this paper would of course be perfectly consistent with the *other* possible Idealistic view, namely, that

The second part of Mr. Moore's passage is not less perspicacious and admirable than that which I have just discussed. "And further if everything, of which he [the Idealist] thinks he is aware, is in reality merely a content of his own experience, he has certainly no *reason* for holding that anything does exist except himself: it will, of course, be possible that other persons do exist; solipsism will not be necessarily true; but he cannot possibly infer from anything he holds that it is not true" (p. 452). I cannot say with how keen a sense of satisfaction I read this passage; for it is the confirmation, from an exceedingly keen and lucid thinker, of a doctrine in regard to the *non-rational nature of transcendence* to which I had been led in the development of my Idealistic views, and especially by considering the impossibility of giving a rational proof of the existence of other minds.¹ The doctrine that we transcend our subjective states by instinct rather than by reason is open to misapprehension. The meaning is not that the subjective state is *given as an object of thought*, and that we are then impelled by an irrational instinct to pass beyond it to a reality which it represents. It is rather that the subjective state *constitutes our being*, and that we find ourselves acting as if what we had to do with were not the state itself but a reality beyond it—the only explanation we can give of our acting thus being that we are formed by nature to act so. I fully admit that the momentary state is never an object of consciousness, and that we do not pass from the state to its object by a conscious process but have to do with the object from the outset, so that we can consider the state only by an epistemological abstraction. But it seems to me that, when we so consider it, we find the state and its object to be separate, to be two, and can discern

material objects are ideal constructions which we undertake upon occasion of our sensations. Personally, I am unable to reconcile this intellectualistic view with the fact that material objects are something we see and touch. That the plain man attributes characters to material objects which cannot possibly be true of his sensations, I have not the smallest doubt; the physical world *as we conceive it* differs in important respects from the portions of that world which are given in our sensations (cf. Prof. Stout's paper on 'Primary and Secondary Qualities' in *Proc. Aristot. Soc.* for 1904); but it seems to me as little open to doubt that what the plain man attributes those characters to is his sensations. If I were not afraid of speaking with too great levity, I should say he had a habit of lying about these—a habit the innocuousness and even utility of which is due to the fact that material objects stand for things-in-themselves of which those characters are true.

¹ See my book *Why the Mind has a Body*, pp. 216-219, 273-274, and my 'Reply to Prof. Bakewell,' in *Philosophical Review* for May, 1904, pp. 339-340.

no bond between them, no proof that the state represents a reality, beyond the fact that we are impelled by a natural instinct to act as if it did.

One more sentence of Mr. Moore's, and I have done with this aspect of the question. "His [the Idealist's] existence [and the spirituality of reality—this does not immediately concern us] are *contents* of an awareness, which is aware of nothing—certainly not, then, of its own content." Here again the Idealist may accept every word. The passage is an exact description of the necessary position of the Subject or Pure Ego—and of any thought or feeling which may happen to form part of the Subject or Pure Ego—with reference to 'awareness' in the sense of thought. It is an excellent statement of the difficulties—or rather paradoxes, for our understanding, accustomed to construe all things in terms of objects-of-thought—in the notion of that immediate experience in which alone the being of the Subject or Pure Ego can rationally consist.¹

So much for thought, and for the difficulties which it seems to present in so far as the object of thought must be held to be other than the state of consciousness that does the thinking. A just estimate of the *function* which our states of consciousness may still subserve in standing for things beyond them, in enabling us rightly to adjust our relations to those things, and in carrying us forward to the next thought in a consecutive and rational manner, seems to me to deprive this objection to Idealism of all weight.

V.

I will bring this article to a close by saying a few words about Mr. Moore's application of the Realistic principle which he conceives himself to have established to the question of the existence of matter. This principle is that consciousness, being numerically separate from the things which it knows, by its very essence informs us of the existence of things that are independent of it. Or, to state the principle in Mr. Moore's own words: "This awareness is . . . of such a nature that its object, when we are aware of it, is precisely what it would be, if we were not aware" (p. 453). (Observe that, on any view, this is a perfectly correct and valid principle *as applying to thought*; but the Idealist

¹ On the inapplicability of the subject-object relation to immediate experience, see my discussion 'Prof. Bakewell on the Ego,' *Philosophical Review*, Sept., 1904, pp. 547-548.

holds precisely that material objects do not exist for us primarily as objects of thought, or of an intuition assimilated in its character to thought, but as experiences, sensations.)

According to this principle, then, when we perceive a material object perception informs us, not merely that the object exists, but also that it *would have existed* in exactly the same way even if we had not perceived it. In other words, it informs us of the *independent existence* of the object. But there is a detail in regard to this independent existence which Mr. Moore neglects to bring out; and I confess to no little surprise that it should have escaped the attention of so keen a logician. Perception, on his theory, informs us that the object would have existed, even if it had not been perceived, *at the moment when the perception actually took place*, but it does not inform us that it would have existed *at any other moment*. If, for instance, I look at my watch at ten o'clock and again at three o'clock, I learn that it would have existed at ten and at three even if I had not perceived it; but I do not learn that it existed during the interval between those hours, or that it existed before ten o'clock and after three. I learn that it existed, and that it existed independently, at the times when the perception actually took place, but not at any other times. Perception testifies to precisely what we perceive, and no more. The only way to assure ourselves that the watch existed during the interval between ten and three o'clock would be to perceive it continuously throughout that interval.

Even on Mr. Moore's theory, then, our certitude of the existence of objects is limited to the moments at which we perceive them. They still retain the irregular outlines—the rough edges, so to speak—and the 'momentary and fleeting' character that are peculiar to our perceptions. Mr. Moore has succeeded in detaching them *spatially*, if I may so say, from our perceptions of them, but he has not succeeded in detaching them *temporally*. He has proved or seemed to prove their *independence*, but he has not made the least progress towards proving their *permanence*. And this for the very simple reason that, even on his theory, although consciousness is not the principle by which things exist, it is yet our sole evidence of their existence, and we have no ground for asserting their existence where this evidence is lacking.

But if even on Mr. Moore's theory material objects still retain the rough outlines and the intermittent existence which are characteristic of our perceptions, I leave it to the reader to say whether it is the Realist or the Idealist who

has the better of the argument. He will perhaps see in the impossibility of establishing the permanence of objects without going wholly beyond any data which consciousness can possibly furnish us an additional reason for looking with suspicion upon Mr. Moore's supposed proof of their independence.

III.—HUMANISM AND TRUTH ONCE MORE.

BY WILLIAM JAMES.

MR. JOSEPH'S criticism, in the last number of *MIND*, of my article 'Humanism and Truth' is a useful contribution to the general clearing up. He has seriously tried to comprehend what the pragmatic movement may intelligibly mean; and if he has failed, it is the fault neither of his patience nor of his sincerity, but rather of stubborn tricks of thought which he could not easily get rid of. Minute polemics, in which the parties try to rebut every detail of each of the other's charges, are a useful exercise only to the disputants. They can but breed confusion in a reader. I will therefore ignore as much as possible the text of both our articles (mine was inadequate enough) and treat once more the general objective situation.

As I apprehend the movement towards humanism, it is based on no particular discovery or principle that can be driven into one precise formula which thereupon can be impaled upon a logical skewer. It is much more like one of those secular changes that come upon public opinion overnight, as it were, borne upon tides 'too full for sound or foam,' that survive all the crudities and extravagances of their advocates, that you can pin to no one absolutely essential statement, nor kill by any one decisive stab.

Such have been the changes from aristocracy to democracy, from classic to romantic taste, from theistic to pantheistic feeling, from static to evolutionary ways of understanding life—changes of which we all have been spectators. Scholasticism still opposes to such changes the method of confutation by single decisive reasons, showing that the new view involves self-contradiction, or traverses some fundamental principle. This is like stopping a river by planting a stick in the middle of its bed. Round your obstacle flows the water and 'gets there all the same'. In reading Mr. Joseph, I am not a little reminded of those Catholic writers who refute Darwinism by telling us that higher species can-

not come from lower because *minus nequit gignere plus*, or that the notion of transformation is absurd, for it implies that species tend to their own destruction, and that would violate the principle that every reality tends to persevere in its own shape. The point of view is too myopic, too tight and close to take in the inductive argument. You cannot settle questions of fact by formal logic. I feel as if Mr. Joseph almost pounced on my words singly, without giving the sentences time to get out of my mouth.

The one condition of understanding humanism is to become inductive-minded oneself, to drop rigorous definitions, and follow lines of least resistance 'on the whole'. "In other words," Mr. Joseph may probably say, "resolve your intellect into a kind of slush." "Even so," I make reply,—"if you will consent to use no politer word." For humanism, conceiving the more 'true' as the more 'satisfactory' (Dewey's term) has to renounce sincerely rectilinear arguments and ancient ideals of rigour and finality. It is in just this temper of renunciation, so different from that of pyrrhonic scepticism, that the spirit of humanism essentially consists. Satisfactoriness has to be measured by a multitude of standards, of which some, for aught we know, may fail in any given case; and what is 'more' satisfactory than any alternative in sight, may to the end be a sum of *pluses* and *minuses*, concerning which we can only trust that by ulterior corrections and improvements a maximum of the one and a minimum of the other may some day be approached. It means a real change of heart, a break with absolutistic hopes, when one takes up this view of the conditions of belief.

That humanism's critics have never imagined this attitude inwardly, is shown by their invariable tactics. They do not get into it far enough to see objectively and from without what their own opposite notion of truth is. Mr. Joseph is possessed by some such notion; he thinks his readers to be full of it, he obeys it, works from it, but never even essays to tell us what it is. The nearest he comes to doing so is where (on p. 37) he says it is the way "we ought to think," whether we be psychologically compelled to or not.

Of course humanism agrees to this: it is only a manner of calling truth an ideal. But humanism explicates the summarising word 'ought' into a mass of pragmatic motives from the midst of which our critics think that truth itself takes flight. Truth is a name of double meaning. It stands now for an abstract something defined only as that to which our thought ought to conform; and again it stands for the concrete propositions within which we believe that conformity

already reigns—they being so many ‘truths’. Humanism sees that the only conformity we ever have to deal with concretely is that between our subjects and our predicates, using these words in a very broad sense. It sees moreover that this conformity is ‘validated’ (to use Mr. Schiller’s term) by an indefinite number of pragmatic tests that vary as the predicates and subjects vary. If an S gets superseded by an SP that gives our mind a completer sum of satisfactions, we always say, humanism points out, that we have advanced to a better position in regard to truth.

Now many of our judgments thus attained are retrospective. The S’s, so the judgment runs, were SP’s already ere the fact was humanly recorded. Common sense, struck by this state of things, now rearranges the whole field; and traditional philosophy follows her example. The general requirement that predicates must conform to their subject, they translate into an ontological theory. A most previous Subject of all is substituted for the lesser subjects and conceived of as an archetypal Reality; and the conformity required of predicates in detail is reinterpreted as a relation which our whole mind, with all its subjects and predicates together, must get into with respect to this Reality. It, meanwhile, is conceived as eternal, static, and unaffected by our thinking. Conformity to a non-human Archetype like this is probably the notion of truth which my opponent shares with common sense and philosophic rationalism.

When now Humanism, fully admitting both the naturalness and the grandeur of this hypothesis, nevertheless points to its sterility, and declines to chime in with the substitution, keeping to the concrete and still lodging truth between the subjects and the predicates in detail, it provokes the outcry which we hear and which my critic echoes.

One of the commonest parts of the outcry is that humanism is subjectivistic altogether—it is supposed to labour under a necessity of ‘denying trans-perceptual reality’. It is not hard to see how this misconception of humanism may have arisen; and humanistic writers, partly from not having sufficiently guarded their expressions, and partly from not having yet “got round” (in the poverty of their literature) to a full discussion of the subject, are doubtless in some degree to blame. But I fail to understand how any one with a working grasp of their principles can charge them wholesale with subjectivism. I myself have never thought of humanism as being subjectivistic farther than to this extent, that, inasmuch as it treats the thinker as being himself one portion of reality, it must also allow that *some* of the realities

that he declares for true are created by his being there. Such realities of course are either acts of his, or relations between other things and him, or relations between things, which, but for him, would never have been traced. Humanists are subjectivistic, also in this, that, unlike rationalists (who think they carry a warrant for the absolute truth of what they now believe in in their present pocket), they hold all present beliefs as subject to revision in the light of future experience. The future experience, however, may be of things outside the thinker; and that this is so the humanist may believe as freely as any other kind of empiricist philosopher.

The critics of humanism (though here I follow them but darkly) appear to object to any infusion whatever of subjectivism into truth. All must be archetypal; every truth must pre-exist to its perception. Humanism sees that an enormous quantity of truth must be written down as having pre-existed to its perception by us humans. In countless instances we find it most satisfactory to believe that, though we were always ignorant of the fact, it always *was* a fact that S was SP. But humanism separates this class of cases from those in which it is more satisfactory to believe the opposite, *e.g.* that S is ephemeral, or P a passing event, or SP created by the perceiving act. Our critics seem on the other hand, to wish to universalise the retrospective type of instance. Reality must pre-exist to every assertion for which truth is claimed. And, not content with this overuse of one particular type of judgment, our critics claim its monopoly. They appear to wish to cut off Humanism from its rights to any retrospection at all.

Humanism says that satisfactoriness is what distinguishes the true from the false. But satisfactoriness is both a subjective quality, and a present one. *Ergo* (the critics appear to reason) an object, *quâ* true, must always for humanism be both present and subjective, and a humanist's belief can never be in anything that lives outside of the belief itself or antedates it. Why so preposterous a charge should be so current, I find it hard to say. Nothing is more obvious than the fact that both the objective and the past existence of the object may be the very things about it that most seem satisfactory, and that most invite us to believe them. The past tense can figure in the humanist's world, as well of belief as of representation, quite as harmoniously as in the world of any one else.

Mr. Joseph gives a special turn to this accusation. He charges me (on p. 32) with being self-contradictory when I say that the main categories of thought were evolved in the course

of experience itself. For I use these very categories to define the course of experience by. Experience, as I talk about it, is a product of their use; and yet I take it as true anteriorly to them. This seems to Mr. Joseph to be an absurdity. I hope it does not seem such to his readers; for if experiences can suggest hypotheses at all (and they notoriously do so) I can see no absurdity whatever in the notion of a retrospective hypothesis having for its object the very train of experiences by which its own being, along with that of other things, has been brought about. If the hypothesis is 'satisfactory' we must, of course, believe it to have been true anteriorly to its formulation by ourselves. Every explanation of a present by a past seems to involve this kind of circle, which is not a vicious circle. The past is *causa existendi* of the present, which in turn is *causa cognoscendi* of the past. If the present were treated as *causa existendi* of the past, the circle might indeed be vicious.

Closely connected with this pseudo-difficulty is another one of wider scope and greater complication—more excusable therefore—which Mr. Joseph deals with (though in much too pettifogging and logic-chopping a way) on pages 33 and 34 of his article. Humanism, namely, asking how truth in point of fact is reached, and seeing that it is by ever substituting more satisfactory for less satisfactory opinions, is thereby led into a vague historic sketch of truth's development. The earliest 'opinions,' it thinks, must have been dim, unconnected 'feelings,' and only little by little did more and more orderly views of things replace them. Our own retrospective view of this whole evolution is now, let us say, the latest candidate for 'truth' as yet reached in the process. To be a satisfactory candidate, it must give some definite sort of a picture of what forces keep the process going. On the subjective side we have a fairly definite picture—sensation, association, interest, hypothesis, these account in a general way for the growth into a cosmos of the relative chaos with which the mind began.

But on the side of the object, so to call it roughly, our view is much less satisfactory. Of which of our many objects are we to believe that it truly *was* there and at work before the human mind began? Time, space, kind, number, serial order, cause, consciousness, are hard things not to objectify—even transcendental idealism leaves them standing as 'empirically real'. Substance, matter, force, fall down more easily before criticism, and secondary qualities make almost no resistance at all. Nevertheless, when we survey the field of speculation, from Scholasticism through Kantism

hand here even less than in the rest of his article. I have myself put forth on several occasions a radically pragmatist account of knowledge,¹ the existence of which account my critic probably does not know of—so perhaps I had better not say anything about knowledge until he reads and attacks that. I will say, however, that whatever the relation called knowing may itself prove to consist in, I can think of no conceivable kind of *object* which may not become an object of knowledge on humanistic principles as well as on the principles of any other philosophy.²

I confess that I am pretty steadily hampered by the habit, on the part of humanism's critics, of assuming that they have truer ideas than mine of truth and knowledge, the nature of which I must know of and cannot need to have re-defined. I have consequently to reconstruct these ideas in order to carry on the discussion (I have *e.g.* had to do so in some parts of this article) and I thereby expose myself to charges of caricature. In one part of Mr. Joseph's attack, however, I rejoice that we are free from this embarrassment. It is an important point and covers probably a genuine difficulty, so I take it up last.

When, following Schiller and Dewey, I define the true as that which gives the maximal combination of satisfactions, and say that satisfaction is a many-dimensional term that can be realised in various ways, Mr. Joseph replies, rightly enough, that the chief satisfaction of a rational creature must always be his thought that what he believes is *true*, whether the truth brings him the satisfaction of collateral profits or not. This would seem, however, to make of truth the prior concept, and to relegate satisfaction to a secondary place.

Again, if to be satisfactory is what is meant by being true, whose satisfactions, and which of his satisfactions, are to count? Discriminations notoriously have to be made; and the upshot is that only rational candidates and intellectual satisfactions stand the test. We are thus driven to a purely theoretic notion of truth, and get out of the pragmatic atmosphere altogether. And with this Mr. Joseph leaves us—truth is truth, and there is an end of the matter. But he makes a very pretty show of convicting me of self-stultifica-

¹ Most recently in two articles, "Does 'Consciousness' Exist?" and "A World of Pure Experience," in the *Journal of Philosophy*, New York, 1st Sept., 29th Sept. and 13th Oct., 1904.

² For a recent attempt, effective on the whole, at squaring humanism with knowing, I may refer to Prof. Woodbridge's very able address at the Saint Louis Congress, "The Field of Logic," printed in *Science*, N.Y., 4th November, 1904.

tion in according to our purely theoretic satisfactions any place in the humanistic scheme. They crowd the collateral satisfactions out of house and home, he thinks, and pragmatism has to go into bankruptcy if she recognises them at all.

There is no room for disagreement about the facts here ; but the destructive force of the reasoning disappears as soon as we talk concretely instead of abstractly, and ask, in our quality of good pragmatists, just what the famous theoretic needs are known as and in what the intellectual satisfactions consist. Mr. Joseph, faithful to the habits of his party, makes no attempt at characterising them, but assumes that their nature is self-evident to all.

Are they not all mere matters of *consistency*—and emphatically *not* of consistency between an Absolute Reality and the mind's copies of it, but of actually felt consistency among judgments, objects, and manners of reacting, in the mind ? And are not both our need of such consistency and our pleasure in it conceivable as outcomes of the natural fact that we are beings that develop mental *habits*—habit itself proving adaptively beneficial in an environment where the same objects, or the same kinds of objects, recur and follow 'law' ? If this were so, what would have come first would have been the collateral profits of habit, and the theoretic life would have grown up in aid of these. In point of fact, this seems to have been the probable case. At life's origin, any present perception may have been 'true'—if such a word could then be applicable. Later, when reactions became organised, the reactions became 'true' whenever expectation was fulfilled by them. Otherwise they were 'false' or 'mistaken' reactions. But the same class of objects needs the same kind of reaction, so the impulse to react consistently must gradually have been established, with a disappointment felt whenever the results frustrated expectation. Here is a perfectly plausible germ for all our higher consistencies. Nowadays, if an object claims from us a reaction of the kind habitually accorded only to the opposite class of objects, our mental machinery refuses to run smoothly. The situation is intellectually unsatisfactory. To gain relief we seek either to preserve the reaction by re-interpreting the object, or, leaving the object as it is, we react in a way contrary to the way claimed of us. Neither solution is easy. Such a situation might be that of Mr. Joseph, with me claiming assent to humanism from him. He cannot apperceive it so as to permit him to gratify my claim ; but there is enough appeal in the claim to induce him to write a whole article in justification of his refusal. If he

should assent to humanism, on the other hand, that would drag after it an unwelcome, yea incredible, alteration of his previous mental beliefs. Whichever alternative he might adopt, however, a new equilibrium of intellectual consistency would in the end be reached. He would feel, whichever way he decided, that he was now thinking truly. But if, with his old habits unaltered, he should simply add to them the new one of advocating humanism quietly or noisily, his mind would be rent into two systems, each of which would accuse the other of falsehood. The resultant situation, being profoundly unsatisfactory, would also be instable.

Theoretic truth is thus no relation between our mind and archetypal reality. It falls *within* the mind, being the accord of some of its processes and objects with other processes and objects—'accord' consisting here in well-definable relations. So long as the satisfaction of feeling such an accord is denied us, whatever collateral profits may seem to inure from what we believe in are but as dust in the balance—provided always that we are highly organised intellectually, which the majority of us are not. The amount of accord which satisfies most men and women is merely the absence of violent clash between their usual thoughts and statements and the limited sphere of sense-perceptions in which their lives are cast. The theoretic truth that most of us think we 'ought' to attain to is thus the possession of a set of predicates that do not contradict their subjects. We preserve it as often as not by leaving other predicates and subjects out.

In some men theory is a passion, just as music is in others. The form of inner consistency is pursued far beyond the line at which collateral profits stop. Such men systematise and classify and schematise and make synoptical tables and invent ideal objects for the pure love of unifying. Too often the results, glowing with 'truth' for the inventors, seem pathetically personal and artificial to bystanders. Which is as much as to say that the purely theoretic criterion of truth can leave us in the lurch as easily as any other criterion.

I think that if Mr. Joseph will but consider all these things a little more concretely, he may find that the humanistic scheme and the notion of theoretic truth fall into line consistently enough to yield him also intellectual satisfaction.

IV.—ON ANALOGY AND ITS PHILOSOPHICAL IMPORTANCE.¹

BY HARALD HÖFFDING.

I.

IF we observe the tendency which in these later years manifests itself in the discussions on the first principles of science, we find that the evidence of the validity of these principles more and more is found in their applicability. The right to set up a principle is founded on the fact that it leads us to a connexion between phenomena which otherwise would be obscure and sporadic. The truth of principles, then, does not consist in their conformity to an absolute order of things :—an order of things we do not know before we—with the help of these principles—have found a connexion between the phenomena. We ourselves produce the truth, when we find the principles, which can connect phenomena in greatest extension and in highest degree. A critical or dynamical concept of truth is making its way, in opposition to the dogmatic concept of truth which can be designated as static, because it supposes a given quiescent order of things which then is to be reproduced in thought. This is nothing new for the philosopher. The critical philosophy, already, postulated a dynamical concept of truth, when it pointed out that objective validity consists in the lawful connexion of phenomena. But it is of no small importance, that not only philosophers but also scientists as Clerk Maxwell, Ernst Mach and Heinrich Hertz, go in this direction. Not only Dogmatism, but also Scepticism is opposed by this view ; Scepticism is constituted by presupposing the dogmatic and static concept of truth and then showing that this concept is illusory.

The setting up of principles is, then, a way to the realisation of an ideal aim, which is to find the greatest possible

¹This paper was read before the Jowett-Society in Oxford, 26th November, 1904.

connexion between the greatest possible number of phenomena. It is not necessary that principles have other qualities than those which are required to the obtaining of this aim. It is not necessary that they contain an absolute reproduction of the innermost essence of Existence. Their aim is to make an order of phenomena possible, and this they can do, even if they contain figurative expressions, if only the inner connexion of the images, which are used, is such that the connexion of phenomena can be expressed and foretold by it. Truth requires, then, no relation of identity, but only a relation of analogy between principles (ideas, axioms) and phenomena (perceptions, experiences). Analogy is likeness of the relations of different objects, not likeness of single qualities. The critical or dynamical concept of truth is then also a symbolic concept. It requires a system of images or signs which make it possible for us to read the relations of phenomena and to be led to new phenomena. We consider the events which experience presents to us, as if they only were alterations of our images. Naturally, the most simple and clear series of images which can fulfil this task is to be preferred. We come so to the principle of simplicity, which was applied so confidently by the thinkers of the Renaissance, or to what in our time has been called the thinking of the world after the principle of least measure of force.

That we have no right to ascribe more than symbolic validity to our knowledge is, then, in the first place, a necessary consequence of the principle, that we have no right to ascribe qualities to it, which are no conditions for reaching its end. If analogy is sufficient for this end we have no right to suppose an identity which cannot be proved. The possibility is never excluded, that other principles than ours could solve the same problems. The transition from reason to consequence is always more sure than the inverse, because different premisses may lead to the same conclusion. An end may be reached in different ways, and it can never be proved that science has found the absolutely only way to order and connexion in the world of experience.

But also from other reasons it follows that our knowledge is symbolic.

We cannot think without images. What we call thinking in a special and strict sense, the activity by which the relation between different images is pointed out as clearly and unequivocally as possible. Every thought, be it as abstract and sublime as it may be, supposes images whose reciprocal relations it expresses. The image may be full and concrete, or it may be a mere scheme or sign. Not only in

our own private thinking, but also, and especially, when we represent our thoughts to others, we proceed in this manner. We think in examples, though we often reduce these examples to simple schemes; and quite evident it is, that we make use of examples and signs, when our thoughts are to be communicated to others.

Our thinking is always an interpretation of a given material. It is activity on the foundation of receptivity. It is true, the contrast of activity and receptivity is not absolute; what from one point of view and on one stage is passive, may from another point of view and in relation to a lower stage be active. But in every single case, in every single act our thinking transforms something given to a new form, and we cannot prove that this work of transformation is of only formal importance, so that the elements of thought and the elements of that which is given should be qualitatively identical. We have no right to suppose that the elements we distinguish in order to explain that which is given, also exist as absolute parts of things. It is sufficient for the validity of thought, that the relations between the elements of thought agree with the relations of the phenomena.

Not only do we in our thinking transform what is given in order to explain it, but our thinking consists in a comparison of different domains of experience, so that the one can make the other clearer for us. All our knowledge, the spontaneous as well as the scientific, is therefore full of analogies. When thinking proceeds to a new task, it does not take up quite new means and ways, but it tries so far as possible to make use of those which it has already applied, especially if they are clear and plain. Language has not produced peculiar expressions for mental phenomena, but has transferred the expressions which originally were made for material phenomena. As there are important differences between the domains of experience, the facts not being homogeneous but constituting many groups, every one with its peculiarities, our thinking must enlighten one group or domain by the means of another, especially so, that the experiences which arrange themselves for thought in the simplest and most fertile way, are made use of for the understanding of the other. This would not be necessary, if existence did not manifest qualitative differences. But the parts of existence, as they are known through experience, are not homogeneous, and analogy is therefore a necessary way to understanding.

I shall now try to elucidate the character and importance of analogy in the different domains of thought.

II.

Every formation of a general concept proceeds through analogy. The elements of the concept (*e.g.*, colour, size and form as elements of the concept of horse) vary in the different phenomena to which it shall correspond, and the concept is therefore only possible, if the relation of the qualities is alike, though every one of them be different. The brown colour has, *e.g.*, the same relation to one horse, as the red colour has to another horse. Human qualities vary from man to man, but there is a certain constant relation between them, and without this a general concept would here be impossible. We can form no concept whose elements identically can be found in all the single phenomena. The concept is formed through a steady transition from example to example in virtue of analogy.

This has a peculiar interest, because analogy from the time of Aristotle has been supposed to stand in opposition to concept. To Aristotle analogy was a tie between different domains which could not be brought under one concept. Analogy begins, where concepts can no more be formed, and relationship by analogy is no conceptual relationship. But this opposition is not true, if the formation of concepts itself presupposes analogy. Instead of this opposition is to be set the opposition between different degrees and sorts of analogy.

In the formation of concepts several examples are compared, and there is made a transition from one example to another, so that the simplest and clearest example is adhered to (perhaps only in schematical form, *i.e.*, with elimination of all unnecessary elements) and is made use of to elucidate the others.

In the formation of principles or axioms the use of analogy is still more evident.

In its strictest form analogy is quantitative and is then designated by its Latin name: proposition. The relation between two numbers can be the same as the relation between two other numbers, though all four numbers are different. In such cases one of the elements can always be found with the help of the others. Quantitative analogy is constructive, and the relation between the different pairs of elements is a relation of identity. The relation between 3 and 6 is identically the same as the relation between 4 and 8, and this relation can itself be expressed in a single term: 2. In this point quantitative analogy differs from qualitative analogy, and its importance for our knowledge has its reason

in this. It determines the unknown through the known relation between it and something known without consulting experience. When relations of number can be pointed out it is possible through them to read the course of events and the place of elements in the world of experience. But this applicability depends itself on an analogy: an analogy between the place of numbers in the numerical series and the place of events in the temporal series or of elements in the spatial series. The numerical series is the simplest and most exact order we can form, and it is natural that all other orders and series be brought in the most intimate connexion with it. This analogy was first pointed out by Maxwell and Cournot.

Movements in space are the events which can most exactly be measured, *i.e.*, numerically determined, and it is quite explicable why Natural Science since the days of the Renaissance has sought to conceive all events in Nature as movements. Qualitative differences and alterations are regarded as merely subjective; sometimes it is said that they are mere appearances. But it is sufficient to suppose an analogy between quantities and qualities so that qualitative relations can be determined and foretold by quantitative relations. Science, then, conceives qualitative alterations as if they were only quantitative, and the alterations are thought as going on in something which only presents quantitative differences. In this way such concepts as matter, atom, ether, are produced. They are images or schemes which can be wholly determined by numbers,—which can be applied consequently,—and which can lead to secure conclusions concerning new experiences. This analogy has shown itself so fertile and important, that it has been regarded as an identity, or at least as the only possible analogy.

Still more fundamental than the numerical relation is the logical relation of reason and consequence. It is at work in all operations of thought, be the object of this operation qualitative or quantitative. This is the most intimate connexion which can exist between our thoughts. It is natural, therefore, that we as far as possible seek to assimilate all our experiences, all relations between events to this relation between our thoughts. We try to construct such a view of the relation between the events, that the one event is in the same relation to the other as reason to consequence. We arrange them in series of such a character that the preceding link can lead to the understanding of the following, perhaps to predetermine it. But as the relation between reason and consequence is a purely logical relation, while the relation between events is a temporal relation,—and as the series of

thoughts is a work of our activity, while the series of events is not produced by us,—it is only through analogy that we apply the principle of reason to events. This was the cardinal thought in Kant's theory on the analogies of experience, which maintained the importance of logical principles for real research, but at the same time made an end to the dogmatic identification of reason and cause, which earlier systems had taught. Later on Wundt has maintained a similar view, while Hegel has made a romantic attempt to substitute identity for analogy. But not even they who nowadays ascribe most importance to Hegel's system, will say that he has been successful here. The laws of thought may enable us to find our way through the world of experience; but from this we have no right to conclude that existence is estimated or in its fulness expressed in the laws of thought.

The numerical series, movement, and the relation of reason and consequence are great examples of the scientific importance of analogy, which already manifests itself in the formation of the single concepts. More special examples may be found in the single sciences. The idea of undulation has, *e.g.*, been transferred from one physical domain to the other in virtue of analogy. Sometimes it is not known what it is which undulates; it is only known that an undulation is going on, as with the so-called "ether". The importance of analogy in Biology—different organs exercising a like function of life—Aristotle has already pointed out. In Sociology there has been an endeavour to get a leading principle, a fundamental scheme in the analogy between society and organism. Eminent authors have tried to build upon this analogy, but they have not been able to make the image of organism a consistent and fertile scheme for sociological research. In the first place, society is a connexion of organisms, and the relations within one organism cannot be transferred to a whole group of organisms. And then, while in the organism the functions of some elements are connected with consciousness, in society all parts are conscious, and must, therefore, be considered as ends in a manner, in which this cannot be said on the parts of the organism. But even the eagerness with which sociologists have sought an analogy which could serve as a principle, testifies to the scientific importance of analogy. And this example shows what conditions scientific analogies must satisfy. They must not only fit on single points, but on all points, so that full consequences may be drawn from them and be applied in the explanation or details. The symbol or the image must serve us as a scheme which

we may follow accurately in the special cases, and which can lead us to new experiences. It is the good fortune of Natural Science that it has such a scheme in mechanical movement. This scheme has now in three centuries led forward to new problems and new discoveries. When speculative philosophy and religious thinking have not led to such results the reason must be that they cannot transform their symbols to accurate and fertile schemes.¹ And the reason of this, again, is that they do not, as the special sciences, try to elucidate one part of existence by another part, but to elucidate existence considered as a whole through a single part of it. This point I will try to make clearer.

III.

If speculative or metaphysical thought is to have any scientific value, its task must be to develop a view of the world as a whole, a theory of existence in its inner ground, on the foundation of empirical evidence. But the world or existence is never given as a whole, and cannot be thought as given so for any mind. The question must then be, whether any of the concepts which are won from special experience, can be adapted to serve as an expression for existence considered as a totality. These concepts are all founded on the ground of special experiences; every one of them expresses only a part or a side of existence. Can then existence as a whole be understood and interpreted by means of any single part or any single side? It is here not, as in the special problems, one part of existence which is to be understood by means of other parts; but it is the whole which is to be understood by means of a part. The problem of knowledge is here sharpened.

When we go from one domain of experience to another, it is possible to indicate the changes which the concepts must undergo in order to be transformed from the one domain to the other. But the change which a concept is to undergo, where it shall be transferred from a part to the whole, must be much more important than when the transition is from part to part. The question is, if a transition after all is possible, the whole may underlie quite other laws than any

¹ In a larger sense also the schemes and the numerical signs are symbols. In this sense the word symbol is used by Leibniz, when he opposes symbolic knowledge to intuitive knowledge (*Meditationes de cognitione*, 1684). I follow Kant (*Kritik der Urtheilskraft*, § 59) in his distinction between symbol and scheme: the first is a concrete image, the second an abstract sign, where only the elements which are necessary for the purpose are retained.

part in it. And the whole may have sides or parts which do not at all express themselves in our experience. Perhaps we know only some of the elements of which existence considered as a whole is composed. At all events, it is here impossible to verify the use of analogy, because the whole is never given. It is then no wonder that our thought cannot on this point come to any definite conclusion. Neither matter nor spirit, neither multiplicity nor unity, neither being nor becoming, are fit to be ultimate expressions of existence. And yet there is a continual want in the human mind to reach what is deepest, to apply its principal thoughts as expressions of existence considered as a totality. This want can scarcely die; but it ought to be connected with the critical consciousness that we always work here with analogies which cannot be carried out, with symbols which cannot be developed to scientific schemes.

Among the hypotheses which here may be maintained, philosophical Idealism is of peculiar importance. It appears in two forms, which I will distinguish as the speculative and the metaphysical Idealism.

The speculative Idealism will not acknowledge that it works by means of analogy. This form of Idealism regards it as a necessity that all which exists, all which has reality, must be at once unity and multiplicity. The greater fullness and the closer unity, the higher a degree of reality we ought to acknowledge. In this standard the very nature of the Absolute manifests itself. Hegel's System is a great example of this view, which in our days has been developed by Francis Herbert Bradley in an important and profound work. I have two things to remark on this view. First.—It is not properly a system, but a standard, an ideal which is given in Mr. Bradley's work. Hegel had a system, but Mr. Bradley has only a standard, and he reminds us more of Kant than of Hegel. Hegel's identification of standard and system is a consequence of his identification of identity and analogy, and a correction of the one of these points must lead to a correction of the other. Secondly.—This standard or ideal is taken from the human mind. In our mind we at every moment find a given multiple content which is to a certain degree combined into unity, and we ascribe to mental life a higher degree of development, the richer the content is without detriment to unity and concentration. It is this standard which speculative idealism transfers from mental life to existence as a whole. This transition is founded on analogy. We suppose that we have right to apply to all existence what is true for that part of it which we immediately know. *The*

metaphysical Idealism acknowledges from the first beginning that it is founded on analogy. Its most eminent representatives are Leibniz and Lotze. Leibniz has for the first time with clearness and energy maintained that the idealistic conception of the world is founded on analogy. The question is then here, if it is necessary to make use of this analogy. Metaphysical Idealism will compel us to choose between Idealism (or Spiritualism), which conceives matter in analogy with mind, and Materialism, which conceives mind in analogy with matter. It is true that our experience does not show us more forms of existence than these two. But their opposition cannot be shown to be contradictory. It is quite possible that the difference is only contrary and that existence—as Spinoza thought—has many more fundamental forms (or attributes) than the two which appear in our experience. On this ground alone the question must remain open, even if we do not accentuate the difficulties of the transference of a concept from a part to the whole.

Metaphysical Idealism has a superiority in the clear consciousness of analogy as the foundation. But speculative Idealism in the form which Mr. Bradley has given it, is distinguished by its standard of reality and by that method of research which this standard leads to. The scientific importance of this idealism is, that it leads us to try to widen our experience and to unify our old and our new experiences in the highest possible degree. An analytical and a synthetical work in continual interaction is so called for, because the connexion of multiplicity and unity is our very standard of reality. And the practical or ethical importance of this Idealism corresponds to the theoretical: it claims at once the extension and the concentration of life. But a systematic totality is still an ideal, and it is only an illusion, when the standard is regarded as a system, or as a guarantee for an absolute system.

I have here only discussed the possibility of a Metaphysics from the real point of view. I have asked if it is possible to find predicates for the world considered as a whole. New difficulties would arise from a formal point of view, through the question, if it is possible at all to think the world as an absolute totality. Also from this point of view the importance of analogy would appear: the concept of a whole is only known from special experiences of the relation of parts to their limited wholes, and the concept of "world" is formed by generalising this concept and applying it in another domain than the original.

Metaphysics is perhaps rather an art than a science. It is

the task of Philosophy to give us a standard to be used in the criticism of the spontaneously developed world-views. In Philosophy, as in Science, the value and importance of principles consist in their power to lead our thought in its work, to conduct to new tasks and new views.

IV.

Religion also works in the sphere of ideas by means of analogy. Religion also maintains a view of totality. But while Metaphysics is guided by the intellectual interest of finding an ultimate idea and leaves it to the consequence of thought and experience, what the content of this idea is to be, the main interest of Religion is the fate of the great life-values (whatsoever they may be) in the great struggle of existence. Religion is guided by the experience, that values arise and values perish, and the religious problem consists in the question, if it is possible to maintain a continuity in spite of this perpetual change and in spite of the limits of our knowledge. The religious consciousness is, where it is original and living, always occupied with seeking a satisfying expression for experiences of the fate of values. It maintains that a great order of things manifests itself in the world of values, of qualities of feeling, as well as in the world of sense-qualities, and it seeks to express this conviction in definite ideas. Values do not stand for the religious consciousness as sporadic flashes, as accidental products in the great process of existence. But it discovers in the course of its development, that what persists cannot be the single, empirical values; their time can end, and yet—that is the faith of Religion—the kingdom of values is persisting. But a hard struggle is going on before this discovery is made. Only reluctantly men give up the supposition, that their immediate experiences are fit to express an absolute reality. The religious consciousness should be glad, if it could escape by acknowledging that all its ideas are symbolic. Dogmatism has here its proper seat, but its general character is the same as in the scientific domain.

Religion is, as well as Metaphysics, obliged to express that which should be an absolute whole by means of ideas which originate from a single part or side of the whole. Its difficulties are in this respect the same as those of Metaphysics. But the struggle between thought and image is more vehement here than in Metaphysics. The metaphysician works to transform the image or the symbol to a scientific scheme. This interest is not the main one in Religion. Here, what

are wanted, are great and mighty images, which express the emotion of the life-struggle and nourish hope and courage. The possibility of consistent appliance of the images has only secondary interest, and it is frequently only criticism from outside which investigates it. If the image only expresses an essential point of the life-experience, it is maintained, and the inconsequences are kept away through exclusion of comparison.

The future of the religious problem depends on the possibility of maintaining the conviction of the continuity of values with progressing experience, and in spite of the clear acknowledgment of the symbolic character of all ideas, in which this conviction expresses itself. But however this future may turn out, the religious problem is seen to present an analogy to the other problems of the human mind. The religious conviction of the persistence of value can only be maintained through a perpetual endeavour to discover and to produce values in the world of experience. In Religion, as in Science and Philosophy, the essential is not the single images or symbols, but the use which is made of them, the work which they inspire.

V.—MR. BRADLEY'S "ABSOLUTE CRITERION".

BY HOWARD V. KNOX.

THE intention of the present paper, on its critical side, is to traverse Mr. Bradley's contention¹ that in the principle "Ultimate reality is such that it does not contradict itself" we have an "absolute criterion" for distinguishing appearance from reality. I hope to show that the principle of contradiction, so understood, is self-contradictory. I wish definitely to disclaim, at the outset, any sinister design of ruining the principle of contradiction, as such, by a *reductio ad absurdum*. Rather, my aim is to save the principle from its friends. The positive aim, that is, of the paper is to contribute towards a better interpretation of the principle than that which pervades the writings of those whose loudly proclaimed devotion thereto takes the shape of treating it as a Moloch, to be propitiated only by the sacrifice of every human interest. For if a *reductio ad absurdum* of the principle of contradiction is to be found anywhere, it is in the pages of *Appearance and Reality*; and it is my ambition to vindicate the principle from the charge of necessarily conducting to a complete *débâcle* of the intellect.

I.

Before proceeding to a direct examination of Mr. Bradley's fundamental thesis, we will, however, take such an example of the results at which he arrives, as will justify this last assertion. A single example will, I think, be more than enough.

In Chapter II., entitled "Substantive and Adjective," Mr. Bradley maintains that the relation between a thing and its qualities is unintelligible. The reason he gives is that "If you predicate what is different, you ascribe to the subject what it is *not*; and if you predicate what is *not* different, you say nothing at all".² It does not require a writer of

¹ *Appearance and Reality*, p. 136.

² *Ibid.*, p. 20.

Mr. Bradley's ingenuity to prove that, once this position is admitted, we cannot escape from this "old dilemma" by substituting one kind of predicate for another. The objection is, of course, as he maintains, equally applicable to every predication whatsoever. Mr. Bradley's position, then, is that the distinction of substantive and adjective, as he calls it, is untenable *because* "S is P" is fundamentally self-contradictory. At the same time he admits that "S is S" does not represent a judgment at all. Thus, in Mr. Bradley's view, every real judgment, irrespective of the actual nature of its content, constitutes a violation of the principle of contradiction.

After further developing this view in the succeeding chapter, Mr. Bradley somewhat naively remarks that "The reader who has followed and has grasped the principle of this chapter, will have little need to spend his time upon those which succeed it. He will have seen that our experience, where relational, is not true; and he will have condemned, almost without a hearing, the great mass of phenomena."¹ It would indeed be waste of time—if time were real—further to follow Mr. Bradley in his devastating progress through "the great mass of phenomena". If everything that can be said about anything is fundamentally unintelligible, it is transparently clear that we can never open our mouth without logically stultifying ourselves. Unfortunately, Mr. Bradley's reason for "condemning the great mass of phenomena" applies equally to everything he himself says about either appearance or reality. Nay, more. If in deference to the principle of contradiction every real judgment is to be "condemned," then *either* the principle of contradiction itself is not really a judgment, *or* we shall best execute its behests by consigning it also to perdition. Or we may put it thus. If in telling us that "Ultimate reality is such that it does not contradict itself," Mr. Bradley is, as he claims, supplying us with "positive news about absolute reality,"² then for that very reason, according to his own principles, he is ascribing to reality "what it is *not*."³

But let us envisage Mr. Bradley's contention from a slightly different point of view, in the hope that patience and sympathy may haply even yet win a way to some hidden depth of meaning. Mr. Bradley asserts that "S is P" is a self-contradiction. Quite obviously, this assertion itself, in order to be true, must be self-contradictory; so that, on the supposition that the assertion has a meaning, self-contradiction will here

¹ *Appearance and Reality*, p. 34. ² *Ibid.*, p. 140. ³ *Ibid.*, p. 20.

be a condition of truth, and not of falsity. Further, to admit that a tautology is not a judgment, is to admit that *only* an assertion of the type "S is P" can have meaning. So that a contradiction of this kind is in fact the necessary condition of meaning in all propositions. The natural conclusion to draw would seem to be that *this kind* of self-contradiction—if we still insist on calling it self-contradiction—is not a defect, but a merit, in any proposition. And surely it should not be necessary to point out that the *condemnation* of any particular assertion as self-contradictory involves a distinction between assertions that are subject to the condemnation and those that are not? To break down the distinction—to represent self-contradiction in the expression of belief as wholly unavoidable—is to represent the demand for consistency of statement as something profoundly irrational. We find, however, that Mr. Bradley prefers not to admit any distinction between harmful and beneficial self-contradiction. Such a distinction he apparently regards as a mere practical makeshift, which theory cannot tolerate.¹ He prefers to adopt the course—which, whatever we may think of it, certainly cannot be accused of being a practical makeshift—of cutting off the branch on which he sits. That is, he not only asserts that 'S is P' is a self-contradiction; but he also insists on so interpreting self-contradiction that this assertion, in order to be true, must at the same time be absolutely false. It is to be hoped that our failure to accept the principle of contradiction when so applied, will not be taken as evincing any disrespect for the principle in the abstract.

We may, however, I think, admit that if Mr. Bradley's view is sound, absolute idealism does indeed represent the last word of philosophy; for henceforth the only possible philosophy will be a philosophy without words, as without deeds. Mr. Bradley has, in fact, shown that a consistent absolute idealism must be speechless. But this consummation, however admirable in theory, is in practice marred by the fact that the absolute idealist is not consistent.

II.

We have seen the result of identifying (1) the conception of self-contradiction as an absolute criterion for the detection of error, with (2) the conception of self-contradiction as an

¹ "The conclusion to which I am brought is that a relational way of thought—any one that moves by the machinery of terms and relations—must give appearance, and not truth. It is a makeshift, a device, a mere practical compromise, most necessary, but in the end most indefensible" (*Appearance and Reality*, p. 33).

absolutely indispensable ingredient of all significant assertion. We may now go on to examine the claims of conception (1), judging it as far as possible on its own merits.

Before reaching that part of his book which ostensibly deals with "Reality," Mr. Bradley does not put forward any definite statement of the principle on the validity of which, as he subsequently says (pp. 136-37), his whole argument rests. We shall not be doing him any injustice therefore, if, in the first instance, we regard his constant appeal in Part I. ("Appearance") as made to the principle in the form "A cannot be both B and not-B".

Now in any alleged instance of self-contradiction in the "appearance" A, the contradiction must be either (1) merely apparent or (2) real. If (1), there is no room for the application of the principle of contradiction. If A's internal conflict is only apparent and not real, there is no ground for condemning A itself as appearance. To apply the principle, therefore, we must assume (2).

To avoid needless complications, we may abstain from pressing the objection that the mere possibility of mistaking an apparent for a real contradiction is an insuperable obstacle to regarding the principle as an "absolute criterion". Even an "absolute truth" can only be an absolute *criterion*, on condition of never actually leading us into error; so that any possibility of faulty application is incompatible with the claim of the criterion to be absolute.¹ Mr. Bradley, however, is untroubled by such doubts. He has no hesitation in assuming, in every case, that the contradiction is real and not apparent. And from his own point of view he is right. For has he not demonstrated in Chapters II. and III. that "a relational way of thought" is *necessarily* self-contradictory? Thenceforth for him there is no need to discriminate between real and apparent inconsistency: for him one proposition must be as unintelligible as another.

But to resume. In order to condemn the "appearance" A as self-contradictory, we must take it as proved that, rightly viewed, it *really* is both B and not-B; since otherwise the contradiction is apparent and not real. On the other hand, the only reason that is adduced for denying the reality of A under these circumstances is that, according to the principle

¹ There is the less need for dwelling on this point, as it has been well worked out already by Mr. Alfred Sidgwick in his article on "Applied Axioms" in *MIND*, N.S., No. 53. I may, however, take this opportunity of pointing out that the whole of the present paper is in keeping with Mr. Sidgwick's contention, that *no* truth can be at once undeniable and applicable.

of contradiction, it *cannot be* both B and not-B. The reality of A is denied on the ground that it cannot be that which, by the very terms of the impeachment, it really is. Thus every attempt to utilise our principle as a criterion involves a denial of its claim to be true absolutely and without qualification. Unless something can be, and is, self-contradictory, there is nothing for us to condemn on the score of self-contradiction. This, then, is the position to which we are reduced: If self-contradiction is possible, the principle is false; and if self-contradiction is impossible, the principle has no possible application. That is to say, the claim of our "criterion" to be at once absolute and applicable is self-destructive.

"But," it will be objected, "all that you have really proved is that in the statement 'A cannot be both B and not-B' A is not to be taken unconditionally. The principle should run 'A, if real, cannot be both B and not-B'; which is equivalent to saying that 'Only appearance can be self-contradictory'. And this accords with Mr. Bradley's own statement of the principle, namely, 'Ultimate reality is such that it does not contradict itself; here is an absolute criterion'."

Well, it is something to have gained the admission that the principle of contradiction requires qualification before it can be made applicable. For now there may be greater readiness to regard it as open to question whether the proposed qualification is the one really required. To this question, then, we will now address ourselves. I think it will be found that, in point of fact, the proposed limitation is a step entirely in the wrong direction.

Restricting ourselves, in the first instance, to Mr. Bradley's plane of thought, we straightway encounter the difficulty that if any alleged contradiction in the "appearance" A is real, then A, as owning that contradiction, must itself partake of reality. It seems strange, does it not, to deny A's reality precisely by reason of some real feature which it is supposed to present? To put the difficulty in a more general way. If reality cannot be self-contradictory, then all self-contradiction must be merely apparent; and conversely, if self-contradiction is real, then the real is so far self-contradictory. We are therefore confronted by the following dilemma: If the contradiction in A is merely apparent, then our "absolute criterion" is not applicable; and if the contradiction is real, then A is so far, not mere appearance, but reality. Here again, then, we see that the attempt to apply our "absolute criterion" is self-destructive.

And the situation becomes, if possible, still worse when we

inquire into the *grounds* of this amazing criterion. On this point there can be no possibility of mistake as to Mr. Bradley's meaning. He says: "For consider: you can scarcely propose to be quite passive when presented with statements about reality. You can hardly take the position of admitting any and every nonsense to be truth, truth absolute and entire, at least so far as you know. For, if you think at all so as to discriminate between truth and falsehood, you will find that you cannot accept open self-contradiction. . . . It [*i.e.*, the "absolute criterion"] is proved absolute by the fact that, either in endeavouring to deny it, or even in attempting to doubt it, we tacitly assume its validity."¹ That is to say, reality cannot be self-contradictory, *because* a self-contradiction is not a possible object of belief. Contradiction is impossible in reality because it is impossible in thought. In other words, the final rendering of the principle of contradiction is "A cannot be *conceived* as both B and not-B".

But this rendering is only verbally different from our original principle, as is evident from the fact that our original dilemma reappears in the following shape: If self-contradictory belief is possible, the principle is false; and if self-contradictory belief is impossible, the principle has no possible application. And, obviously, so far as it is true that A cannot be *conceived* as both B and not-B, so far is it true, and true without any sort of qualification, that A cannot *be* both B and not-B.

Mr. Bradley's argument, therefore, defeats itself. Clearly, for the special purpose of the "absolute criterion" it is needful to show, not so much that reality cannot, as that appearance *can*—and, indeed, must—be self-contradictory. Or our difficulty may be more fully stated thus. Our readiness to accept as axiomatic the dictum, that "Ultimate reality is such that it does not contradict itself," entirely depends upon whether or not that dictum is taken as equivalent to the assertion that *only* 'ultimate' reality can escape self-contradiction. At the same time, without assuming that equivalence, the dictum obviously cannot pose as an absolute criterion for distinguishing appearance from reality. And it is precisely in respect of this crucial point that Mr. Bradley's argument appears so singularly defective: the impossibility of self-contradiction in the abstract is doubtless a valid reason for denying the possibility of self-contradiction in reality, but does not by itself seem a valid reason for assuming the possibility of self-contradiction in any concrete form whatever.

¹ *Op. cit.*, pp. 136-137.

Or can it be that Mr. Bradley holds *experience* to be a sufficient guarantee for the reality of self-contradiction—though not for that of anything else? Is he prepared to maintain that because self-contradiction is impossible in reality, therefore experience is powerless to establish the reality of that which appears to be self-contradictory; but nevertheless suffices to establish the reality of the self-contradiction? However that may be, what we are entitled to demand is a reasoned justification of the strange theory that the principle of contradiction *does not apply to appearance*; and all that we get is the assurance that a self-contradiction must be absolutely unthinkable. In other words, Mr. Bradley's exclusion of appearance from the proper scope of the principle of contradiction is purely arbitrary: it stands, not for a qualification, but for a denial, of the principle of contradiction.¹

In the foregoing review of the relation between Mr. Bradley's criterion and the grounds actually adduced in its support, I have been content to lay stress on the arbitrary character of the transition from the impossibility of self-contradiction in reality to the necessity of self-contradiction in appearance. I am not concerned to deny that 'arbitrary' is a somewhat colourless epithet with which to describe so violent a transition as that from the affirmation to the negation of the principle of contradiction: I simply wish to emphasise its sufficiency in regard to the pretensions of the "absolute criterion". For unless these two statements, "Ultimate reality is such that it does not contradict itself," and "Appearance is essentially self-contradictory"—unless these can be shown to set forth diverse aspects of one and the same principle, the "criterion" abruptly fades into the inane. It seems clear that nothing less heroic than the absorption of the principle of contradiction in some higher synthesis could possibly meet the requirements of the case. But even this consideration—though, to our human limitations, it might seem fairly decisive—when taken barely as it

¹ We are therefore justified in saying that, under the most favourable interpretation, Mr. Bradley's theory of the Universe amounts simply to this. The principle of contradiction is unassailable on grounds of pure reason, *but*—this whole world in which we live and move and have our appearance forms one vast, rigid and unintelligible exception thereto. It is quite in accordance with the fitness of things that the author of such a scheme should profess abhorrence and contempt for every form of scepticism. And yet a rule, which, so far as our positive knowledge extends, consists entirely of exceptions, seems to afford a somewhat insecure basis on which to rest dogmatic statements about the nature of ultimate reality.

stands is no adequate measure of the futility of the "absolute criterion". The resistless self-disruptive tendency of the "absolute criterion" resides in the fact that, in basing the impossibility of self-contradiction in reality, as opposed to appearance, on the impossibility of self-contradiction in thought, *it thereby represents [false] appearance as antithetical at once to thought and to reality.*

Now, whether we assert or deny the ultimate identity of thought and reality, it remains true that *if* any being is wholly distinct from thought, then such distinctness constitutes an infeasible title to reality. To "identify" thought and reality is merely to treat the possibility in question as wholly meaningless. If, therefore, a given "appearance" actually *is* independent of thought to the extent of refusing to be bound by the laws thereof, we cannot do otherwise than acquiesce in its masterful reality. That is to say, a self-contradictory appearance, if such a thing were possible, would *ipso facto* be reality in the shape of the thing-in-itself: and the fact that to be at once an appearance and a thing-in-itself is to be a contradiction, would but enhance its reality. Indeed, its title to reality would be twofold: firstly, on the ground that the contradiction itself is taken to be a real feature in the "appearance"; and secondly, on the ground that *nothing but* reality could so triumphantly defy the laws of thought.

We see, then, that to oppose appearance to thought is to identify it with reality. And the complement of this, namely that to oppose appearance to reality is to identify it with thought, is perhaps even more obviously true. What possible account, indeed, can be given of false appearance, except that it is an appearance which has been wrongly interpreted? And where there is interpretation, there thought has been at work. Contrariwise, an appearance, taken for what it is, is simply fact. As Mr. Bradley himself is fain to admit, when arguing against the thing-in-itself, "What appears, for that sole reason, indubitably *is*; and there is no possibility of conjuring its being away from it".¹ Thus appearance can be contrasted with reality, only according as it is assimilated to thought. Whence it follows that if we deny anything of reality *on the ground that it is impossible to think it*, we must, *à fortiori*, deny it of appearance. We must, in fact, deny it of what may be called "appearance *überhaupt*"; *i.e.*, of appearance in the widest sense, as comprising both false appearance on the one hand, and true

¹ *Op. cit.*, p. 132.

appearance, or reality, on the other. In other words, a necessary law of thought is by its very nature incapable of serving as a criterion for distinguishing appearance from reality. The law must be operative in *all* thought, irrespective of the character of the thought as true or false: since, if it is not so operative, it forfeits its claim to be a genuine necessity of thought. The real meaning therefore of the dictum that "ultimate Reality is such that it does not contradict itself" turns out to be "Appearance, as such, cannot be self-contradictory". Or, rather, the only sense in which appearance can be self-contradictory, is that there can be such a thing as the appearance of self-contradiction without the reality of it.

III.

But since appearance, as such, cannot be really self-contradictory, it follows that if the appearance A is found to combine the attributes B and C, then we are bound to regard this fact as a decisive proof that C cannot be truly described as not-B, in the sense contemplated by the principle of contradiction. As Mr. Schiller puts it, "Nothing which *exists*, in however despicable a sense, can really be contradictory. . . . If, therefore, it appears 'contradictory' the fault is ours."¹ To admit that A is truly appearance, is to deny that it can be really self-contradictory. It has, indeed, been already shown, as Mr. Schiller also suggests,² that the only alternative would be to regard, not appearance as such, but reality, as essentially self-contradictory. If A has so much reality as is implied in the fact of its being an actual appearance, then its self-contradictory nature, by removing it from the realm of thought, must enthrone it in the kingdom of the thing-in-itself. On the other hand, if we *can* deal with A in thought to the extent implied by our thinking of it as an actual appearance, then A must be essentially amenable to the necessary conditions of thought.

The conclusion above set forth can be obscured only by assuming, with Mr. Bradley, that "not-B" as (1) implying incompatibility with B—which is the sense required by the principle of contradiction—is necessarily identical with "not-B" as (2) simply implying difference from B. And we have already seen to what result that assumption leads Mr. Bradley himself. Having, in fact, once realised that "S is P" cannot without self-contradiction be regarded as really self-contradictory, we have no longer any excuse for confus-

¹ *Humanism*, p. 187.

² *Ibid.*

ing the above two senses of "not-B". And once we have realised the ambiguity of that expression, and have recognised the sense it must bear for the purposes of the principle of contradiction, we shall have no difficulty in perceiving that the only way in which we can decide the question whether so-called "not-B" is really incompatible in thought with B—whether, that is, an alleged contradiction is real—is *by applying the test of experience*. The only thing that can render "not-B" really incompatible in thought with B is—not the fact that the former is called not-B—but our actual inability to regard them as common attributes of the given subject A. Instead of saying, therefore, that thought is to decide whether experience is self-contradictory, we must say that only experience can decide whether an alleged self-contradiction is really such or not. The more irresistible the proof that a so-called contradiction is really present in an actual experience (such as change), the more inevitable is the interpretation that the so-called contradictory elements thereof are *not really* contradictory. In other words, the apparent proof that such a contradiction is real, is really a proof that the contradiction is only apparent; and conversely, if the contradiction that seems to be disclosed is really a contradiction, that is a proof that the analysis has been incorrectly performed.

IV.

The present paper will have fulfilled its object if it has succeeded in showing (1) generally, that there are difficulties in connexion with the intellectualist norm of non-contradiction, at least as serious as any involved in the pragmatist acceptance of the reality of change; and (2) specially, that Mr. Bradley's uncritical use of the principle of contradiction commits him to contradictions which, judged by any standard, seem real, and judged by his own standard are necessarily so.

As against those, therefore, who gravely raise the question, "Is motion possible?" I would as gravely put the prior question, "Is self-contradiction possible?" And this question, I venture to think, is one which whosoever rejects the idea of change as self-contradictory will find peculiarly hard to answer satisfactorily. If he is not in a position to show that precisely such self-contradiction as he professes to find in change is theoretically possible, he, of all men, will of course not ask us to believe that it nevertheless is real. But if he *does* succeed in establishing the possibility of a genuinely self-contradictory notion, he will thereby have uprooted the

principle that a self-contradiction, *qua* unthinkable, can have no place in reality. On the other hand, to maintain that the contradiction, the reality of which it is sought to establish, resides not in the notion but in the thing itself, would be to abandon altogether the position, that what is unthinkable cannot possibly be real. In short, to assume the possibility of self-contradiction in change—whether that contradiction is located in the notion or in the thing—is to deny the impossibility of self-contradiction in reality. Indeed, so far as the self-contradictory nature of "A becomes B" is bound up with the self-contradictory nature of "S is P," so far is it bound up with the view that self-contradiction is something the *avoidance* of which is not possible—nor even desirable. The champions of consistency-at-any-price really must make up their minds as to whether self-contradiction is possible or impossible. That either alternative is equally fatal to the contention that change is unreal, is their misfortune, and not our fault.

But that, I admit, is an *argumentum ad hominem*. The real problem, as I understand it, is this: What is the real nature of self-contradiction; and what is the nature of the condemnation to which it is truly subject? And, further, What is the real relation between self-contradiction and error? These questions admit, I believe, of an intelligible answer; but not without our having recourse to those very categories which Mr. Bradley condemns as false on the ground of their being self-contradictory. It would be interesting to know if Mr. Bradley can furnish a solution of our problem, which shall be at the same time a justification of the method followed in *Appearance and Reality*.

VI.—PHENOMENALISM IN ETHICS.

BY F. C. DOAN.

THE most characteristic feature of present-day metaphysics is the distinction which is being made more and more conspicuously between the "inner" and the "outer" meanings of a given fact, its aspect as phenomenal and its aspect as noumenal. The very considerable efforts of Prof. Royce and Mr. Bradley, for example, have had at least this effect even among unbelievers:—that the latter are indebted for greater clearness of conception and truer insight into the meaning of the *phenomenal*. A defence of phenomenalism in Psychology published in *MIND* from the pen of Mr. Bradley has inspired largely the thought of this following article. In general our thesis will be: that the outer meaning of an act, even in the cautious thought of Prof. Royce, and much less in the confessedly unknowable sense of Mr. Bradley—the outer meaning of an act is never operative in producing that act. The meaning of the act as a present event with its psychological flurry of associates, it is this which is the vital, telling feature of the act, and not its completed meaning as it appears when set consistently into a monistic whole. Any interpretation of an act in terms of a greater world-theory is an account of that act which either (1) refers it to a conception merely writ larger than its own simple meaning and yet of precisely the same order of fact, or else (2) falsely counts as operative that which is merely the metaphysical condition of complete thinking about the act and not the actual condition under which the act may be, and almost always is, performed. In a word, a metaphysic which proposes a completed reality has no motor quality and so is non-ethical.

We may define phenomenalism provisionally in the words of Mr. Bradley as "the confinement of one's attention to events with their laws of co-existence and sequence. It involves the complete abjuration of any attempt to ask in psychology for ultimate truth or consistency, and it involves the adoption

as relative truth of whatever serves best to explain the detailed course of facts or those particular ways in which things happen."¹

Thus it will appear that there are two widely differing attitudes which one may assume toward experience. One of these Mr. Bradley has just expressed for us under the name of phenomenism. The other of these is that which Mr. Bradley esteems to be the metaphysical attitude *par excellence*. In this latter case one attempts an explanation of experience not in its character as a present event which involves a past or future content not at all, except in terms of "dispositions," the hypothetical laws of a given moment of consciousness; this latter attitude on the contrary attempts an explanation of a given experience in terms of what we have called its "outer" meaning and involves an extension of the meaning of the experience to the point where it gets an appropriate setting in a metaphysical whole of experience. Thus, a moment of time considered phenomenally would be merely what C. Lloyd Morgan describes somewhat loosely when he speaks of the "moment of consciousness"; that is, a moment for phenomenism is merely any given state of consciousness with a past and future involved in it only in the form of "dispositions"; here there is no inconsistency in alleging that the moment both has and has not duration because, forsooth! we do not allege all this in the name of metaphysics but merely in the name of a phenomenistic psychology. Now on the contrary a moment of time when viewed metaphysically—let us say noumenally—is at once infected fundamentally and in its inner core by this foregoing contradiction which *phenomenally* was of no import. Our thought of a moment of time is not metaphysically complete until somehow we have reconciled the fluidity of the passing moments with the rigidity of a time which does not pass.

This distinction between the attitudes of phenomenism and that of noumenalism is closely allied to, if not identical with, the more common distinction between the *naïve* and the reflective attitudes towards the world. The *naïve* mind, for example, has no troubling difficulty with the fluidity of passing time until in reflexion upon the alleged eternity of time it experiences that "ache" of the mind which caused Emerson to prefer infinite depth of life to infinite length of it. And why should the mind in its strains after a completed reality experience this ungrateful ache? The explanation is

¹ See MIND, N.S., vol. ix., No. 33, p. 26. The italics are ours.

not far to seek. We have just said that the two possible attitudes in philosophy are closely related to the attitudes in our common experience which we know as, the one *naïve* and the other *reflective*. And now we may say further that *no reflexion can complete itself upon the naïve materials of experience*. In other words these two attitudes of mind represent in fact two fundamentally disparate worlds, the one the world of all actual or possible experience, the world of phenomena; and the other the world which is inevitably the metaphysical condition of final thought about the world of phenomena, but which is never by any device of language or thought converted into a world of possible experience. Our meaning will become clearer in another connexion. Meanwhile the purpose of this paper may now be expressed as an attempt to indicate that the sanctions, the impulses of our moral life are dependent, not upon any reference of this moral life to a metaphysically completed world-life, but at the very most upon a large, though not absolute, extension of this world of actual or possible experience to the point where we should have a world of moral experiences made actual but with a reality nevertheless which would still be phenomenal.

A priori phenomenalism in ethics is based upon the conviction that *isolation* is the very inner nature of things, as we do or may ever find them by experience.

A posteriori this phenomenalism takes account of the fact that the agent is unaware that his every moment is so tightly bound up with a metaphysically complete world, that his every step is trembling the universe to its very foundations, the sound thereof echoing and re-echoing into the remotest corners and most distant corridors of the world. The man in the street will deny that any spot in the world is thus intimately identified with other spots either phenomenally or metaphysically, and this denial we take to be adequate to invalidate at least the metaphysical presupposition of completed reality as operative in regulating any partial reality. On these grounds,—and the foregoing evidence of common experience would alone be sufficient support of the supposition,—phenomenalism rests its claim upon a conception of this world of experience as a multiverse of isolated facts, at least *ethically* as well as psychologically, whatever may be Reality metaphysically.

We may best indicate further what we signify by these two differing attitudes toward experience by introducing at once two illustrations of them.

In the matter of freedom for example. Mr. Bradley restricts the meaning of phenomenalism so that one confines

his attention to "events with their laws of co-existence and sequence". Here obviously the possibility of freedom among events is by definition excluded. Phenomenalism thus narrowly—and as it seems to us arbitrarily—conceived would involve one in determinism. There could be therefore no ethic of phenomenalism in any true sense; and one would be forced beyond the region of phenomena "with their laws of co-existence and sequence," in order to secure a freedom and a consequent ethic. It is quite obvious that freedom is the presupposition of any hortative ethic and equally so that determinism is the presupposition of psychology. We need not question whether psychology can proceed with its theories in a world where the possibility of freedom is not at least *ex hypothesi* ignored. A world in the degree that it is free is in that degree capricious, and caprice would make our results in psychology for ever uncertain and indeterminate. But it is important to note in passing that this presupposition of absolute causality in the world of experience is a mere *conventional* device—i.e. is merely a conventional agreement which in actual experience here and there may turn out to be a fictitious agreement; but it is nevertheless an agreement which in spite of its possible fictitious character is quite legitimate since it serves the worthy purpose of securing psychology upon the modern pedestal of the exact sciences. But this conventional presupposition of causality among the events or phenomena that are for psychology is quite different from the presupposition which extends the same determinism to cover descriptively *all* phenomena or events. If there is a problem of freedom at all it is a problem which concerns itself with a certain class of *phenomena*, or to be more precise it is a problem which concerns itself with a certain attitude toward *phenomena*. The *phenomenal* character of the individual's activity would not in any way be disguised or transcended by the infusion of freedom into his acts. And the act or the phenomenon in its true sense would be merely an *isolated* event; the question of its causation would so far remain abrupt. So far as *phenomenalism* is concerned the manner of sequence among "events" is unimportant though this would be of prime significance for the interests of psychology. This is not an attempt to define or to defend freedomism; such an attempt would conspicuously exceed the limitations which are promised by the title of our paper. Our point is merely this: that any genuine freedom is to be found among phenomena and that in some sense there must be for the purposes of ethics a freedom in phenomenalism. If this freedom is of such a sort as to

make certain events capricious or unpredictable then the field of psychology as a natural science is limited, and the phenomena of psychology are not inclusive of all phenomena. Or if—which is our own view of the matter—freedom among phenomena is merely a certain attitude toward them which is assumed for the purposes of practical living, an attitude which curiously enough would have an entirely adequate psychological description—if, we say, freedom is of this latter sort the same world of phenomena has a different aspect and meaning, in the one case when being scrutinised by psychology and in the other case when being expressed, and even in a legitimate sense caused, by the pulsating living of them.¹

If we agree, therefore, that phenomenalism has no necessary issue in determinism; that if there be freedom at all it must be a freedom which in some sense and in some way frees *phenomena* from their "laws of co-existence and sequence," the question at once persists, "What is this freedom?" And here one may assume either of the two attitudes with which this article was introduced, one of which we called the phenomenalistic or *naïve* and the other the noumenalistic or reflective.

Assuming this latter attitude and asking how a phenomenon can be essentially free we shall be forced into a world not of phenomena but of some sort of reality which is intended to relieve the inconsistency of the *phenomenal*. This world we may provisionally call the noumenal, the world made so familiar by Kant as the world of things-in-themselves. The reality of supreme worth is the moral life. This must be saved at any cost, and so we find Kant astonishing beyond credibility his philosophical contemporaries by his apparently arbitrary postulation of these great realities of the moral life which had been analysed away in his previous essay in epistemology. It is exceedingly doubtful if this apparent caprice of the great philosopher has ever been understood. We must not here exceed the limits of our article by making another contribution to the extensive literature of the subject. It will be sufficient for our purpose to indicate that there are two possible interpretations of the world in which freedom has a supreme reality. One of these is the *completely reflective* view which gives us a disguised freedom in a world of completed experience or reality where all appearance has *disappeared*, and where we are se-

¹This view will of course be recognised as closely allied to that of Prof. Hugo Münsterberg.

cure in all sorts of logical consistencies and ethical beatitudes which are incredible and even inconceivable in this world of phenomena ; phenomenal partiality, the inner and outer inadequacy of the phenomena,—all these maimed phenomena are made whole ; partial ignorance has been found to be one aspect of absolute knowledge ; error mysteriously becomes the highest truth, evil becomes partial good, etc. In the midst of these transformations our passing experience which seems to come to us with the guarantee of reality and which indeed seems to be in exclusive possession of the stamp of reality—this luminously real of passing experience is found to be mere appearance. The sportive dwarfs of our momentary experience are merely tolerated good-naturedly and *for the sake of a psychology of experience* ; real and absolute life being quite different and that in such a way as to invest the passing moment with the *insignia*—not its own—of eternal reality. Now saying nothing of the inconceivability of this alleged real world of metaphysics, we have insisted that it is in any case a world disparate from any world of possible experience. We are reliably informed by our inner consciousness of the inevitable partiality of experience. It is incredible, for example, that this inner consciousness of mine, which has so conspicuously and so inevitably the stamp of privacy, can be *wholly* taken up into a consciousness of a higher order, however largely it may be a spark in this larger flame ; again it is incredible—to make the point more general—that in experience the world of particulars will ever be found to be completed by the same order of facts ; *in experience* the centre of a stone for example will always be merely the just disappearing last particle of it ;¹ or the outer limits of the world of experience will be inevitably the largest possible experience merely. This world of the reflective or noumenalistic attitude is not the world of *real experience*. Obviously freedom in a world of this sort would be as unreal as all the other alleged furnishings of such a world.

But though it is true that so long as we examine reflectively experiences in their character as events we may require a logical postulate which in the last analysis is *merely* a logical device ; it is nevertheless true that viewed naïvely, or in their character as data for the moral life, these same experiences become suffused with a very different sort of reality. Freedom, for example, requires no greater verity than this : that it should be *felt*. What boots it that a free act is an isolated act, or even that such an act is inconceivable to a certain

¹ Mill calls this the "*minimum visibile*" (see *Logic*, p. 148).

attitude, so long as it stubbornly clings to its previous reality as being merely a phenomenal characteristic of experience? After this somewhat disproportionate introduction we may neglect the problem of freedom with the thought that *phenomenally* freedom is felt to be a characteristic of the passing experience, of the phenomenal event which as material for psychology has one kind of reality and as material for the moral life has a reality of a quite different sort, our present point being that in both cases are we legitimately within the boundaries of phenomenalism.

We may now introduce very briefly our second illustration of these two attitudes towards experience and of what we have considered to be the two disparate worlds in which these two attitudes inevitably issue, the one the world of rigid reality which is merely the background for the other, the world of fluid-experience. What would be the *self* corresponding to these two methods of viewing experience? It will be claimed by some that phenomenalism gives us a Self too composite, or too partial, etc., to be suitable for ethical purposes; that the moral life can be made intelligible only by the importation into it of some metaphysic of the soul that will give it a substance more unifying and more universally identical and permanent than such devices of psychology as "Apperception," "Teleological Memory," etc. But here again we insist that for *naïve* experience the feeling of identity, the content of mind at any given moment with its connexions with past experiences in the form of "dispositions"; that the feeling of "warmth" and "intimacy" which shifts perceptibly with the shifting of the mental content of which it is the self-consciousness but which nevertheless possesses a "functional" identity—we insist upon it that this interpretation of the self is adequate alike for psychology and ethics; that the ethical life is not the absolutely completed or interpreted life but that it is peculiarly the life of phenomenal movements; that any conception of it from the point of view of absolute sanctions, absolute ends, absolute organisations, etc., makes impossible the act of appropriation which, as we shall see later, is the distinctively ethical act. This self which Mr. Bradley accepts as adequate for psychological purposes and which we appropriate as being also adequate for ethical purposes has been so admirably presented in the article already referred to that we need give no further analysis or description of it. Our point is merely that here as elsewhere in experience the phenomenalistic attitude alone can bear fruit; that the absolutist attitude can give at most a self which has no motor

quality and which is merely the logical background of the phenomenal self, the self of Ethics.

With these two illustrations in mind we may say that the important word in Mr. Bradley's preliminary sentence is not "sequence," etc., but is "events". By "event" one may mean for the purposes of phenomenalism merely that which in actual experience is cut off from what precedes and from what follows; in a word that which does not require a completed world-theory for its interpretation. It is an experience complete in itself and only metaphysically a part of any absolute whole. Thus for the purposes of this discussion we consider the essence of phenomenalism to be expressed as the "complete abjuration of any attempt to ask in psychology¹ for *ultimate truth* or consistency" or "the adoption as *relative truth* of whatever serves best to explain the detailed course of facts". Questions which will seem to force the issue into the field of metaphysics—as for example the question of phenomenal connexions—will inevitably arise but they will not be such as to strike at the very roots of this doctrine of phenomenalism in ethics. This latter attitude in ethics is essentially a practical method, proposing a theory of relativity which for the purposes of actual motor life will resist the insidious advances of a monistic metaphysic; a theory which is content, when applied in ethics as well as when applied in psychology, not to interpret events, acts, phenomena, etc., by absolute standards; standards which become at once impossible tests or explanations because incommensurate with the simple, isolated phenomena which are to be interpreted. The plea of these phenomena, these isolated events which populate the whole world of possible experience—their plea that they bring with them their own interpretation, their own full meaning, their own test of reality—this plea is to be respected.

The ethical significance of the distinction which metaphysics is making between these "inner" and "outer" meanings of a phenomenon, a bit of experience, is in the last analysis found in the distinctions between monism and pluralism, the latter of which we consider to be the legitimate issue of phenomenalism. Is an act good in the degree that it is rational—rational, *i.e.*, in the monistic sense? Or is an act good in the degree that it commands a more emotional, a more inner sanction? Are we or are we not reliably assured by our inner consciousness that the appropriation of smallness, privacy, or what not, is the ethical act *par excellence*?

¹ And we may now say "in ethics".

In general, monistic constructions have resulted from an emphasis of the speculative attitude rather than of the practical attitude toward experience; not what the experience is on its own account or in its own phenomenal character, but what its presently real meaning *implies* has been the consideration taken as representative of its genuine philosophical significance. For long it has been tacitly assumed in certain philosophical circles that the rational is synonymous with that which is (at least conceptually) complete; in one case completely blocked, in another case completely organised. Now, that neither case represents the actual fact, it is the purpose of what Prof. James defends as "radical empiricism" to prove. It is the object of this paper incidentally to indicate in its latter portion that an empirical organisation somewhat more pretentious than that which is necessary in Prof. James's system is the presupposition of the moral life; but chiefly that this organisation falls short of the concrete monism of Hegel; the latter representing in a situation that which is logically implied in it but which is ineffectual. The situation is logical, the act is mostly allogical.

Our meaning will be clearer if we give brief notice to two types of monistic interpretation.

The first of these, with which we shall have little concern as it denies the validity in any sense of pluralism, is the abstract Monism¹ of Spinoza and in general of Hindu thought. In this abstract monism there is but one reality, all particularity being illusion. The one may be identical with the whole of Reality; this is the view of the Vedantist system of religious philosophy and of Spinoza's *Ethics*. "Besides God no substance can be granted or conceived" (Prop. xiv.). The logical outcome of this view is absolute rigidity; or put more softly it is a "rest" in God which is taken as the highest blessedness, but which is essentially the renunciation of all participation in life. Witness the word of the sweet singer and mystic Thomas à Kempis: "Above all things and in all things, O my soul, thou shalt *rest* in the Lord always, for He is the everlasting rest of the Saints". Another type of this Abstract Monism identifies the One with the Nothing. Such is Buddhistic Nihilism if we accept the common view of this system. The Sankhyan system seems to partake of the character of both varieties of Abstract Monism. We are but slightly concerned with this

¹ "Henism" has been suggested as a suitable designation of this type of Monism.

type of Monism; for it will be found that in those cases where it has seemed to issue not in rigidity and consequent insipidity, but in some sort of active functioning of the agent, it has in fact taken on the character of the concrete type of Monism which we are about to consider. A consistent adherence to Abstract Monism is a moral impossibility. And it is the special object of the remaining pages to prove that it stands no otherwise with concrete monism, our only expedient therefore being a resort in ethics to radical pluralism, the only legitimate issue of phenomenalism.

Let us consider therefore what has been called the "Concrete Monism" of Hegel, for example. By a certain type of interpretation which the writer accepts but which need not be described in this connexion, the world of Kant's *Kritique of the Practical Reason* would be of this concretely monistic sort, though the more popular and inaccurate interpretation of this world of the "Practical Reason" relegates it unsympathetically to a region of things-in-themselves quite apart from this region of partly experienced phenomena. But that Kant in his second *Kritique* and in his *Religion within the Bounds of Bare Reason* intended merely a certain attitude assumed for the purposes of the moral life toward an otherwise causal world of phenomena—that Kant meant merely the twofold attitude toward the same Reality we are assured. Our present point in passing is merely that in his conception of Perfection, for example, Kant has become involved in the difficulties of Concrete Monism.

By the fundamental position of his Concrete Monism it is alleged that the real is co-terminous with the rational and that the ethical, moreover, is completed rationality.¹

The first of these presuppositions we must call in question, if by "real," as identical with the rational, is meant the real of actual or possible *experience*. The world of our thought is dichotomised into the facts of actual or possible experience which have merely a phenomenal reality and on the other hand those rational devices—not contentual—by which the world of phenomenal experiences gets its absolute interpretation, but which have only this ideational reality.

We may illustrate the distinction by reference to the epistemology of space-conceptions. If one introspect his experience when he perceives a certain quantum of space, he will find that this spot of space is being perceived iso-

Thus it is that we find "goodness" defined as "the Identity of Idea and Existence" (see Bradley's *Appearance and Reality*, especially chap. xxv.).

latedly and that it is only in reflexion upon the experience that he becomes involved in what the late Dr. Martineau called an "ontological apprehension" of an infinitude of space in which the finitude gets its setting. In a rigidly metaphysical sense it is unquestionably impossible to image a spot of space without relieving the inner and outer incompleteness of it by the conception of an infinitude. But it is important meanwhile to notice two points which are reported to us by our common experience and by our inner consciousness of the nature of experience. (1) No additive process, however long continued, can group any number of finitudes into an infinitude of space.¹ So in ethics no summary of acts, each an improvement upon its predecessor, can give us completed perfection; and no enlargement of a partial organisation of the world can be adequate to the conception of completed organisation. And yet each of these absolute completions is the inevitable, metaphysical condition of its appropriate finite term. (2) Our second point, closely related to the foregoing, is: that just as an infinitude of space, though the metaphysical condition of thought about a finitude of space, is quite insignificant to the naïve, unreflective mind in its perceiving of space and space-relations; so of the ethical act, the agent can perform it and assess it in virtue of its own inner meaning in the passing experience, being only metaphysically and not phenomenally involved in a race toward a constantly receding goal.

Take the mathematical series:—

$$1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} \dots 2.$$

Here we have as the limit of the series the definite, conceivable number 2. But meanwhile, though it is true that the series can have a completed meaning only in reference to its limit 2, it is also true—and this is important—that the series never reaches its limit 2; or, to put it otherwise, the limit 2 never gets directly into the series in such a way as to saturate the series with its own meaning.

Now let us represent parts of the phenomenal world, the apparent world, as "A," Appearance; and let us represent the noumenal world, the real world in the monistic sense, as "R," Reality. Then, letting "*n*" represent an unknown

¹ See Spencer's *First Principles*, e.g., pp. 26 *et seq.*; also Martineau's *Essays*, etc., essay on Mansel's *Limits*, etc., pp. 134, 135 *et seq.*, also essay on *Science, Nescience and Faith*, pp. 203 *et seq.* Our only point of disagreement with Dr. Martineau is in his assertion that this "ontological apprehension" represents a reality in things; i.e. a reality of possible or actual experience.

increment-factor of Appearance, we might have some such series as:—

$$A + 2 \frac{A}{n} + 4 \frac{A}{n} \dots R.^1$$

Now just as in the case of the mathematical series (I.) the series implies its limit 2, but (II.) is never directly suffused by its limit, or in a word never reaches its limit; so in the case of the world-series there is no possibility that the terms of the series can ever be coloured by any direct contact with the noumenal Reality which each of its terms implies.

We have taken this as specially illustrative of the Kantian system.² If we let the terms of the series represent the ever changing movements of the agent as he deliberates and chooses what his life shall be at any given moment,³ the question arises, "In what sense, if at all, is a given term in the series determined by the limit of the series?"

The series is only conceptually determined by its limit. Any given term in the series is determined by the inner meaning of the series itself and not by any outer meaning which it must have in reference to its limit. This inner meaning of the series in the illustration from mathematics was the constant $\frac{1}{2}$. What is the meaning of the ethical series which determines each accretion or decretion?

The clue is to be found in that ambiguous word borrowed

¹ It is of course obvious that no particular series in the moral order would proceed with this graphic regularity.

² The lettering in the system might be appropriately changed as follows: letting "s" represent partial selfhood and "S" noumenal selfhood; whence the series: $s + 2 \frac{s}{n} + 4 \frac{s}{n} \dots S$. Or letting "p" represent partial perfection, the perfection of Appearance and "P" noumenal perfection; whence the series: $p + 2 \frac{p}{n} + 4 \frac{p}{n} \dots P$.

³ We may suggest here in passing a further difference between this moral world series and the mathematical series. If the mathematical series were not limited in its nature by definition, there might occur at any point in the series such a change that we could see that the series had reached or even passed its alleged limit. In such an event we could merely predict shrewdly that any given term will sustain a certain relation to its preceding term by observing what has been true of preceding terms. Now this is precisely what occurs in normal, imitative or habitual, responses which we make to our environment. Another point in this connexion is that we know *a priori* by an examination of the internal meaning of the moral series that, unlike the mathematical series, there can never occur such an internal disruption that the series will ever reach or pass beyond its limit. Here seems to me to lie the fundamental error of Bradleyan systems. The limit "R" does not in any way connect with the workings within the series.

from Evolutional Philosophy, the word "Development".¹ Each term of the ethical series is a development from the preceding term and determines what the following term will be, or at least ought to be in order that the organism represented by the series should get its most natural and fullest expression. The series of the moral life has its own inner meaning which requires no explanation in terms of a conceptual limit, but only in terms of the adjustment of meanings, attainments, claims, etc., in the terms of the series itself. Not only the terms of the series are found in the world of phenomena, but also the sanction therefor. Just as it is possible to proceed naively with the mathematical series securing each term as the preceding term multiplied by $\frac{1}{2}$, and moreover not allowing at the moment that logically the series approaches 2; so also it is possible naively to express each movement of the moral agent as a fragmentary outcome either of the preceding term, or (more largely) of our conception of the meaning which this phenomenal organism has.²

To summarise: there are two attitudes from which we may view the same Reality of Experience; one of these in Mr. Bradley's view is exclusively the psychological attitude; and the resulting system of psychology is to be known as phenomenalism. In this view one regards merely a present moment of consciousness with its phenomenal limitations, these latter being allowed merely for psychological purposes; a past or a future span of consciousness is involved in this psychological moment only as an element of the present moment itself and which we know merely as "dispositions," one of the working hypotheses of psychology or phenomenalism. The other attitude on the contrary would insist upon a complete interpretation of a given moment, a given experience or what not; "dispositions," could no longer remain as merely convenient hypotheses but would require for the rationalising of them that they should be traced infinitely to

¹ See articles of Antonio Llano in the *Open Court* on "Developmental Ethics," vol. xi., nos. 3 and 4. Spinoza and his followers surrender unconditionally to the impossible limit of the series.

The outer limitations of the organism are interestingly put by M. Ferrière in his recent "*Cause première d'après les Données expérimentales*". See especially the distinction between "internal" and "external" finality.

² The merely conceptual character of the monistic limits might also be illustrated by a series of concentric circles growing smaller and smaller in one direction and larger and larger in the opposite direction. The limits of this series would be, zero in the one direction and infinity in the other. *In neither case would the limit be a circle; i.e., in neither case would the limit partake of the nature of the series.*

their utmost lairs in the being of the Absolute. So of a given spot of experience or of reality ; so also of activity, of the self, etc. In a word metaphysics presumes to relieve the partiality of those data which for psychology may consistently remain partial ; in fact whose very partiality it is which characterises them as the data of psychology.

Our secondary thesis throughout the foregoing discussion has been that this latter construction of metaphysics, though an absolute condition of thought about an experience, becomes however a mere fiction when it presumes to represent an Absolute Real of actual or of possible *experience* ; that the inner nature of experience is this very phenomenal character of it ; and that the metaphysical remedy of this alleged deformity of experience is merely a formal device by which we slur over experience without correcting its deformities.

But however this may be, our main thesis remains unchallenged : that the moral life is to be found and is to get its expression within the phenomenal series and that any absolute view of it must be peculiarly ineffectual in attempting to complete the series in facts of experience. Here as well as in psychology one's attitude must face the partial real of experience in the frank consciousness that it can never be made whole ; nor indeed does this moral series have the need to be made whole, for it has its own sanctions, its own motives securely within the series itself. These inner meanings which are all-sufficient in practice are to be found within the organism with its phenomenal character, its constant rewards of organic satisfactions and penalties of organic disturbances. That this organism can be defined with even greater definiteness than this we shall attempt to indicate in a following article on "The Concrete Moral Life of Phenomenalism".

VII.—DISCUSSIONS.

THE DEFINITION OF 'PRAGMATISM' AND 'HUMANISM'.

His characteristic generosity has prompted Prof. James not only gallantly to come in and take his full share of the obloquy with which these new conceptions have been greeted,¹ but also to try to minimise his own services in their development. And inasmuch as his disclaimer of originality, if uncorrected, might go down as authoritative, I cannot allow him so greatly to understate the debt I owe him. If at the same time I take the opportunity to discuss terms of which the relations are as yet often confused, less by reason of their inherent affinity than because they have found the same expositors, and to give reasons for partially dissenting from the delimitations which Prof. James has proposed (p. 455), I trust that the unavoidably personal aspects of my explanations may thereby be sufficiently obscured as to seem tolerable.

In the first place, then, I must confess that indignation at what seemed the blindness of Prof. James's critics in habitually admitting his eminence as a psychologist, but denying the coherence of his philosophic views, was a great stimulus to me in trying to bring out the inner connexion of his scattered dicta about the will to believe, the teleology of perception and conception, the nature of 'necessary' truths, the distinction of immediate and discursive knowledge, etc. The discovery also that a willingness to believe was clearly, in some cases, a condition of the attainment of 'truth,' and a cause of its 'reality,' naturally prompted to an inquiry how far this influence might be traced, and what must be the general nature of an intellect in which such phenomena could occur. When subsequently the pamphlet on *Philosophical Conceptions and Practical Results* announced to me the naming of 'pragmatism,' I found acceptance easy. But it seemed natural to generalise also this principle of Peirce and to inquire similarly—What must be the nature of a mind in which practical consequences can become determinants of truth or falsehood? This inquiry led to extensive and deepening doubts of the whole intellectualist interpretation of the nature of knowledge, which has now come to seem to me as inadequate intellectually as its consequences are deplorable ethically, and to be all honeycombed with ambiguities, errors and

¹ In the October number of *MIND*; cf. the June number.

incoherences. Both the critical and the constructive results embodied in *Axioms as Postulates* and *Humanism*, moreover, seemed to me to follow so directly and logically from Prof. James's principles that I am still astonished that none of his immediate pupils seized an easy opportunity of anticipating both Prof. Dewey and myself. Since then I have become acquainted with Prof. Dewey's important work, which I take to have finally demonstrated the impossibility of the correspondence-with-reality view of 'truth,' and to ensure the overthrow of Absolutism by weapons wrested from its own armoury, *viz.*, by the very argument it had urged against realism.

This bit of psychical history will perhaps explain why I scruple to restrict 'pragmatism' to its original use. In Peirce's sense it seems to crave an extension which it has undoubtedly received, and even in Prof. James's account of the matter it is by no means easy to make the distinction sharp.¹ To say that 'truths should have practical consequences' is very vague, and hints at no reason for the curious connexion it asserts. It is hard, moreover, to see why even the extremest intellectualism should deny that the difference between the truth and the falsehood of an assertion must show itself in some visible way. Even its actual denial, therefore, by over-zealous controversialists, hardly persuades me that Peirce's principle is more than a truism,² which hardly deserves a permanent place and name in philosophic usage, and naturally merges and evolves into the wider sense of the term so soon as it is scrutinised.

For to say that a truth has consequences and that what has none is meaningless, must surely mean that it has a bearing upon some human interest; they must be consequences to some one for some purpose. But now, we may ask, *how are these 'consequences' to test the 'truth' claimed by the assertion?* Only by satisfying or thwarting that purpose, by forwarding or baffling that interest. If they do the one, the assertion is 'good' and *pro tanto* 'true'; if they do the other, 'bad' and 'false'. Its 'consequences,' therefore, when investigated, always turn out to involve the 'practical' predicates 'good' or 'bad,' and to contain a reference to 'practice' in the sense in which we have used that term.³ So soon as therefore we go beyond an abstract statement of the narrower pragmatism, and ask what in the concrete, and in actual knowing,

¹ It did not require the verbal ingenuity of Mr. Joseph's wrestlings with the conception in the last number of *MIND* to convince me of this.

² So far as I have observed, Prof. A. E. Taylor alone has denied it outright (*McGill University Magazine*, iii., 2, p. 50). But even he prudently refrains from trying to illustrate how "between two doctrines which are, so far as their consequences in practice are concerned, indistinguishable, there may yet be all the difference between proved truth and demonstrable contradiction".

³ The strange narrowness of the intellectualists' conception of 'practice' is one of the most painful revelations of the controversy. They always profess at least to take the most sordid views of the 'useful'.

'having consequences' may mean, we develop inevitably the full-blown pragmatism in the wider sense. All that the latter adds is a denial that into the establishment of truths there enters any other process than the valuation of their consequences. Peirce's pragmatism had already implied this process, but left open possibilities that other things also might go to the making of 'truth'. These possibilities are definitely excluded when the Peircian pragmatist asks himself 'What more is there in truth?' and finds that there is *nothing* more.

Hence we may effect a transition from the original assertion that the truth expresses itself in the 'consequences' to the more advanced conclusion that it so expresses itself *fully*, i.e., 'consists' in them, and that if it is really 'true' those consequences are 'good'. By itself, however, and without such further explanation, the word 'consist' may well appear to lack precision, and I myself have never used it. But it refers to a definite situation and to a perfectly consistent attitude towards knowledge. That situation may be referred to, that attitude may be defined, in a variety of ways, according as we approach it by one road or another. I myself have availed myself freely of that right by defining what I call pragmatism, as (1) the thorough and methodical recognition of the influence of the purposiveness of mental life on all our cognitive activities; (2) as the conscious application to the theory of knowledge of the teleological psychology suggested by a metaphysical voluntarism; (3) negatively, as a protest against abstracting from the actual purposiveness of our experience in constructing theories of thought and reality; (4) as the doctrine that 'truths' are values and that 'realities' are arrived at by processes of valuation, and that consequently our 'facts' are *not* independent of our 'truths,' nor our 'truths' of our 'goods'.¹ To these definitions I may now also add three of a more distinctively logical complexion, *viz.*, (5) that *meaning depends on purpose*, and Mr. Alfred Sidgwick's pithy formulas that (6) the meaning of a rule lies in its application, and (7), *a fortiori*, that the 'truth' of an assertion depends on its application.

Now it is of course obvious that these definitions are verbally very various, and so sure to bewilder any critic who declines to look beyond the expression to the facts referred to. A thinker however who is really trying to grasp the meaning of pragmatism may find them helpful and may finally discover that for this purpose the expressions are really equivalent. In any case one who has not yet discovered their equivalence has little claim to flatter himself that he understands what the question of pragmatism is about.

Pragmatism then, in this wider sense, refers to the way in which our attributions of 'truth' and our recognitions of 'reality' are established and verified by their working, and sooner or later brought to the definite test of experiments which *succeed or fail*,

¹ *Humanism*, p. 8, slightly paraphrased.

i.e., give or deny satisfaction to some human interest, and are valued accordingly. It arises from the original pragmatism by the growth of the conviction that no other processes need be appealed to to account for the truths that are current, and expands the original 'estimation by consequences' into a general view of the mind and its cognitive activity. In other words pragmatism rests on facts which may easily be observed by any one who chooses to watch any process of actual knowing ending in the establishment of a claim to truth. The method by which the 'true' is discriminated from the false is plainly pragmatic, and has always been instinctively employed, though a full philosophic consciousness of its character has only recently been attained. And on the whole 'pragmatism' seems the best name for this method which has so far been suggested.¹

This wider pragmatism, moreover, embodies a very important truth just now, because, oddly enough, it has not yet been discovered to be both a fact and a truism. I have long waited in vain for its critics to ferret this out, and can only put down their failure to the fact that they are still too excited to have observed how very innocuous a principle it really is. Instead of subverting all but the most grossly useful forms of knowledge it really vindicates all but a few metaphysical phrases which have no genuine sphere of application, and so can hardly be said to mean anything. Nevertheless, even here, some of the fundamental assertions are hardly in dispute. No critic of pragmatism has, I believe, directly denied either the omnipresence of psychological interest or the dependence on psychical satisfaction, which together pervade all intellectual functioning. The corollaries therefrom doubtless have not been perceived, and Prof. Taylor, and perhaps a few others, have evinced a tendency to suppose that what they imagine to be a 'disinterested' interest in 'pure' thought and 'useless' knowledge, and a (presumably unreciprocated) affection for Absolutes are somehow not to be counted as cases of emotional interest, but to be classified apart from the common herd of psychological motives. Such fancies, however, are as untenable as Kant's 'pure respect for the moral law,' and when the epistemological consequences of admitted psychological principles are calmly traced out, it will be seen that pragmatism is inevitable, and must gradually win its way to universal acceptance.

As regards what I have proposed to call Humanism, however, the situation is very different. Ideally, no doubt, it too should be a truism, for if all philosophers were reasonable and devoid of human frailties it would, as Prof. Dewey has remarked,² be assumed as obvious that the nature of man must be presupposed in all man's reasonings. But actually, as Prof. Dewey well points out, this assumption is bitterly contested. And this probably will always

¹ Prof. Dewey's 'instrumentalism' might perhaps be substituted were it not so open to linguistic and æsthetic objections.

² *Psychological Bulletin*, i, 10, pp. 336-337.

be the case. For even a slight familiarity with the psychology of philosophers will make it seem extremely unlikely either that they will ever universally consent to use man's integral, unexpurgated nature whole-heartedly, as a premiss in their lucubrations, or view its satisfaction as the conclusion to be reached, or that if they did so consent, they would reach concordant results. Some Humanists probably there will always be; indeed my knowledge of their numbers has been notably enlarged since my scientific caution and modesty dared not vouch for more than two.¹ But to be a Humanist there will always be needed a certain whole-souled temperament, odious to the *φύσει* intellectualist, and (because of their mode of life) this will always continue to be rare among technical philosophers, though no doubt in future the instinctively humanistic nature will be permitted better opportunities of growth than heretofore, even when it finds itself engaged in an academic career. And so for a long time to come we must expect still to see the great principle of Protagoras maligned or perverted by those congenitally unfitted to appreciate it.

There will consequently be many pragmatists who cannot rise to Humanism; nor indeed is there any logical necessity why they should do so. It is quite possible to accept pragmatism as an *epistemological method* and analysis, without expanding it into a general philosophic principle. No man can be compelled to have a metaphysic (else there would be no need for a Mind Association!), or at least to be conscious of it. Any one can, if he chooses, stop short on the epistemological plane, as he can on that of science or of ordinary life. If, on the other hand, he proceeds to become a Humanist, he will no doubt regard his pragmatism as merely a special application of a principle which he applies all round, to ethics, æsthetics and theology, as well as to the theory of knowledge. Clearly, therefore, we must distinguish Humanism even from the wider pragmatism.

But in the case of every philosopher who builds out his convictions into a 'system' there will always be much that is not deducible from any objectively formulated principle, and (whether he knows it or not) is subjective and idiosyncratic, due to his personal experience and personal reactions on the food for thought which his life affords. For example, in the present state of our knowledge, his interest in the question of a future life must largely depend on whether he has or has not found his life worth living. And generally it must be recognised that a philosophy is always in the last resort the theory of a life, and not of life in general or in the abstract. There is no reason, therefore, to anticipate that the adoption of Humanism (or even of Pragmatism) will at all diminish the number and variety of systems. Personally, indeed, it would

¹ *Humanism*, p. xvi. It grieves me to think that Prof. Dewey (*loc. cit.*, p. 335) should have misapprehended my remark. However, I am delighted to welcome him and others; the more we are the merrier we shall be, and the rosier the prospects for a 'fröhliche Wissenschaft'.

seem to me to argue abysmal conceit and stupendous ignorance of the history of thought to cherish the delusion that of all philosophies one's own alone was destined to win general acceptance *ipsissimis verbis*, or even to be reflected, undimmed and unmodified, in any second soul.

But the existence of this personal element should render critics all the more cautious to discriminate between what is due to it and to the more objective factors in a 'system'. To quarrel with its idiosyncrasies is no way to refute its fundamental principles: in discussing these, such *personalia* are always more or less irrelevant. Now in the present controversy I cannot but think that our critics have often allowed *our* idiosyncrasies to bulk so largely as to obscure the main issues; a procedure which may be partially excused by the accidental fact that there happens to be an unusual amount of coincidence between Prof. James's personal 'over-beliefs' and mine. But much as it would flatter one's *Wille zur Macht* to get them all securely tied on to the new philosophy, and participating in its success, such things as, *e.g.*, interest in Psychical Research, are not really of the essence of Pragmatism or even of Humanism, and it was, therefore, quite a relief to me to find Prof. Dewey pointedly dissociating himself from some of my most cherished convictions.¹ For really, if there is to be healthy progress in philosophy, we must have more tolerance, less party-spirit, no cast-iron creeds, and (in a word) no more absolutism.

F. C. S. SCHILLER.

¹ *Loc. cit.*, p. 335.

ENERGY AND EFFORT.

1. THE studies on which the theory of Matter and Mind, distinguishable as a theory of Energy and Effort, was founded, were chiefly concerned, first, with the metaphysical works of Hume and Kant, Fichte and Schelling, Hegel and Schopenhauer; and secondly, with the physical, biological, and psychological researches of, respectively, Faraday and Maxwell, Darwin and Haeckel, Bain and Spencer. It is with reference to the ideas of the former and the results of the latter that I would have that conception of *Atoms as mutually determining centres of pressure* (which I first published in 1859, 1860 and 1861), and its generalisation in the proposition, *Every existent determines and is determined by co-existents*, considered and criticised. For my present conception of the correlation of Matter and Mind as, ultimately, the correlation of Energy and Effort, is simply a development, influenced by half a century of further European research, of that conception and generalisation of forty-five years ago.

2. Matter is thus conceived as a space-occupying mass, or centre of energy (=capacity of doing work). And the originality of this conception of forty-five years ago lay in this, that atoms were *not* conceived as isolated bodies with absolute properties, but, on the contrary, as bodies existing only as co-existents, and as, therefore, having their properties determined by the relations between each atom and its co-existents, in other words, Atoms were conceived as centres of Radiant Forces, or of radiating "Lines of Force," and as, through such forces, exerting determinative influences on each other. Hence, further, atoms are *not* conceived as *in* an ether with which they have no organic connexion; but as, by their emanations, constituting the medium so called. And however this theory of atoms may be modified, I venture to think that, in essentials, it will be found verifiable not only by recent researches generally on radiations, but more especially by J. J. Thomson's conclusions with reference to matter and electricity and Mendeléef's with reference to matter and the Periodic Law, and matter and the ether.

3. But Atoms are thus, as mutually determining co-existents, conceived, not only as centres of *Energy*, or capacity of *doing* work, but as centres of *effort*, or capacity of *directing* work. Directing it to what? The very conception of mutually determining co-existents implies effort to such general ends as self-conser-

vation and self-differentiation. For only by effort to such ends can an atom conceived, not as an absolute existent, but as a relative co-existent, maintain itself. And thus, there is given by this conception of mutually determining co-existents, the integration and differentiation made so much of both by Hegel and Spencer, by the former, however, as an essential part of his conception of the activity of the *Idea*; while by the latter neither can be brought into any organic connexion with his fundamental metempirical entities "matter, motion and force," not one of which actually exists, as postulated, apart from both the others.

4. It will be evident on reflexion that the conception of the Atom above indicated is a conception of it as a *live* Atom, and hence that the motion of there being an essential difference between the bodies usually distinguished as Atoms, Molecules, and Cells, is virtually broken down. But what are Atoms in the latest conception of them as "Electrons," but such live Atoms as I ventured to suggest in my British Association *Proposal of a General Mechanical Theory of Physics and Chemics* in 1859? Concerning the Physical Atom as, simple though its constitution, essentially such a system as is the Cell, determining, and determined by, its Co-existents, I refrained from adding Organics to Physics and Chemics only because I feared that such an audacity would lead to the rejection of my paper. The suggestion of a mechanical theory even of Chemistry was, in the middle of last century, more than sufficiently audacious. But progress since then has consisted, as I venture to submit, first, in the ever ampler verification of the "Principles of the Science of Motion" set forth in my *Philosophical Magazine Papers* in 1861, questionable as, doubtless, some of the illustrative explanations and minor suggestions may now be; and secondly, in its becoming ever clearer to myself that a general mechanical theory could be but one side of what, on its other side, would be found to be a general psychological theory.

5. Note, then, that the conception of mutual determination is no merely metaphysical notion of *Wechselwirkung* as for instance with Schelling; but is an inference from, or generalisation of, an immense number of inductively ascertained facts; and is, indeed, implied in that Principle of the Conservation of Energy, usually stated as a law of equivalent transformation. But if the conception of mutual determination is accepted, with that of bodies as not absolute, but relative and correlative in their properties, then, there must be affirmed for bodies conceived as centres of energy, not only a capacity of *doing* work, but a capacity of *directing* work, in relation to other such capacities, or, in a word, Effort. For otherwise the cause of motion would have to be conceived as acting from outside of the system of things. And I submit that the fundamental postulate of science is, that the causes of things are inherent in the system itself of things; or as Hume expressed it with reference to the design argument, that there is a principle of order in Nature itself.

6. Doubtless it is true that, as has so often, and by men of so different opinions, been insisted on, there is no passage conceivable from motion to consciousness, or equivalence of transformation between the one and the other. But the most distinguished of those who have insisted on this impossibility have no less strongly insisted on the "potentiality" of life and consciousness in what appears to be inanimate, though they had not solved the problem as to *how* this "potentiality" could be verifiably conceived. The hypothesis here suggested is an attempt to solve this problem. It is suggested that if atoms are conceived, as research since 1859 seems more and more to have urged, as *live* atoms, there must be distinguished in them the two correlative capacities above defined of energy and effort. And there is no question, therefore, now of an impossible transformation of motion into consciousness.

7. Motion and consciousness are regarded as correlates not sequences. Not with motion, but with the cause of motion is the origin of consciousness connected. That cause is in its mechanical or outward aspect, a differential relation of pressures; in its psychological or inward aspect, Will. But there are, at least, three degrees of Will—using the term in its most general sense—degrees corresponding to the three great orders of existents which we know. These degrees of Will may be defined as effort, instinct and volition. There is, therefore, no irrationality in deriving the consciousness of aim and choice of means, which is associated with human volition from that, perhaps, inconceivable, but certainly supposable, infinitesimal degree of Sentience associated with the self-conservative and self-differentiative efforts of inorganic bodies. And the verification of this hypothesis should raise fruitful questions in the whole circle of the sciences, and especially in physics, in biology, and in psychology.

J. S. STUART GLENNIE.

VIII.—CRITICAL NOTICES.

Einleitung in die Philosophie. Von HANS CORNELIUS. Leipzig : B. G. Teubner, 1903. Pp. xiv, 357.

THIS Introduction to Philosophy consists in the main of an attempt to prove what is the correct solution of a single philosophical problem. This problem, with which by far the greater part of the book is occupied, is the question of the 'objective existence' of matter and its relation to our minds. Herr Cornelius represents the development of philosophy as leading successively to four erroneous views upon this question—Materialism, Naturalistic Dualism and two forms of 'Dogmatic' Idealism, Sensualistic and Rationalistic. He tries to show that there are conclusive objections to all these views; and he then gives the arguments which he thinks sufficient to show that a certain other view, his own, is the true one.

In judging the book as an Introduction to Philosophy, it must, I think, be admitted that this problem, which Herr Cornelius has selected for consideration, is the one with which it is best to begin the study of philosophy. The solution of all other philosophical problems mainly depends upon principles which must be discussed in the settlement of this one; and the chief premisses used in their solution have almost always been drawn from the consideration of it. Moreover, I think it may be said that Herr Cornelius does discuss the most obvious of the premisses and principles thus involved. In the third place, his method is a good one. The attempt to prove what views are right and what are wrong is certainly far preferable to a purely historical or dogmatic treatment. And lastly, he is so clear that it is unusually easy to discover exactly what he holds to be true and false, and for what reasons.

On the other hand, it must be admitted that there are most important philosophical problems which Herr Cornelius leaves out of sight altogether; whereas he implies that he has surveyed the whole field of philosophy. With one exception, he scarcely even mentions any question, except that which forms his main theme and those which are directly involved in its solution. This single exception is that he appends to each of the views on matter and mind, which he discusses, a brief discussion of ethical views, which he takes to be connected with it; and it must be added, as a second criticism upon his book, that his treatment of ethical questions is very poor indeed, being greatly inferior both in clearness and in acuteness to the treatment of his main subject.

But it is by the treatment of this main subject that the value of the book must chiefly be judged. And against the soundness of Herr Cornelius's arguments and conclusions upon this subject the most serious objections can be urged.

These arguments and conclusions are, as has been said, divided into two groups. In the first part of the book, which he entitles 'The Metaphysical Phase of Philosophy,' Herr Cornelius states and attempts to disprove the four views named above. In the second and longer part, which he entitles 'The Epistemological (*erkenntnistheoretische*) Phase of Philosophy,' he states and attempts to prove his own view. It will presently be necessary to consider some of the arguments contained in the first part, but, first of all, I propose to discuss Herr Cornelius's own position.

By the use of the title 'metaphysical' for that part of the book in which he discusses the views he disagrees with, and of the title 'epistemological' for that in which he gives his own, Herr Cornelius indicates that he has not only a conclusion but also a method to advocate; and his argument for his position depends almost entirely upon the validity of this method. He represents it as consisting largely (though, as we shall presently see, not solely) in the *analysis* of certain conceptions. The errors of 'metaphysical' or 'dogmatic' philosophy are, he holds, largely due to the failure to make this analysis. The conceptions in question, which had come to be used before philosophy began and are still used by us every day, he calls 'naturalistic'; and 'the most important conceptions of this kind are,' he says, 'firstly the conception of *existence independent of our perception*—especially of the permanent existence of the *material world* and the things in it, including the conceptions of *objective space* and *objective time*—and further, the conception of *cause* and that of the *Ego* or *Personality*' (p. 46).

Of these three 'conceptions' it is to the first that he devotes by far the greatest share of his attention. And we shall obtain a clear idea of his method and his principal conclusions by considering his treatment of it—the conception of 'existence independent of our perception' or (for he appears, in general, to use the terms as synonyms) of 'objective' or 'permanent' existence.

He holds, then, that an 'empirical analysis' of our 'conception' of the objective existence of matter yields the result that it is merely a conception of 'the regular connexion (*gesetzmässiger Zusammenhang*) of our perceptions'. And this 'conception' he holds to be valid; our perceptions are regularly connected. But unfortunately, as might be expected, this is not his only conclusion. He says, indeed, as a result of his method, that the very conception of the objective existence of the material world is merely the conception of an orderly connexion between our perceptions, and that

there really is such an orderly connexion; whence it would follow that the material world really does exist objectively in the only sense in which any one could ever have supposed that it does. But this is by no means what he wishes to maintain. In fact, as we should expect, his chief anxiety is to prove that the material world does *not* exist objectively, in the sense in which the Materialist and Naturalistic Dualist maintain that it does. And consequently our first objection to his argument is that it is flatly self-contradictory. He first maintains that the proposition 'The material world exists independently of our perceptions' is *identical* with the proposition 'Our perceptions are in orderly connexion'—this is the result of analysis; he then maintains that the second proposition is true; and he concludes that the first, which is, on his own showing, *identical* with the second, is false.

This, so far as I can understand it, is the main argument of the book; that is to say, Herr Cornelius's argument, and the importance which he attributes to his method of analysis, depend solely upon the commission of a gross fallacy. He supposes that he can prove a given proposition to be false, by maintaining that it is identical with (has no meaning other than) a proposition which he holds to be true. And it must be confessed that, when he so supposes, he is in the very best company. The fallacy which he commits is (to mention no other names) the very same which forms the essence of Hume's much-admired treatment of causality, and of Berkeley's treatment of the existence of matter. 'What we think of,' says Hume, 'when we think that two events are necessarily connected is merely that, when the first occurs, we are compelled to expect the second; that we are so compelled is true; and therefore we have reason to suppose it false that any two events are necessarily connected.' 'Matter,' says Berkeley, 'consists of our ideas; and therefore, plainly, matter does not exist, although our ideas do.' Herr Cornelius is, therefore, by no means the first philosopher to argue that a given proposition is false, because the only meaning which can be given to it is one which is true; I wish it could be hoped that he would be the last.

Herr Cornelius's method really consists, therefore, not in mere analysis, but in a grossly fallacious use of its results. And the contradiction, which has shown us this, also shows that his analysis is false. For if, as he holds, matter does *not* exist objectively in the sense in which the Materialist supposes that it does, then, at least, the conception of 'regular connexion between our perceptions' cannot be our *only* conception of objective existence. We certainly have *also* the conception (true or false) of material qualities really existing, even when no mind perceives them or is in any way aware of them. And, indeed, I think it is plain that it is to this conception alone, and *not* to that of 'regular connexion between our perceptions,' that the words 'existence independent of our perceptions' properly apply. At all events it is the question whether *this* conception applies to matter or not,

which has always had such a predominant interest for philosophy ; it is his negative answer to *this* question, which gives its main interest to Herr Cornelius's own position ; and it is certainly *this* denial which he must prove, if he is to refute the Naturalistic Dualist.

But, once this is plain, then it is also plain that, by his supposed 'analysis,' Herr Cornelius has advanced us not one step towards such a proof. It may be that he has correctly analysed our conception of 'regular connexion between perceptions' ; it may even be that the words 'objective existence' are ambiguous and do sometimes apply to this conception ; it may be admitted, finally (what few philosophers have greatly cared to dispute), that our perceptions are regularly connected. But in all this there is obviously nothing incompatible with the supposition that matter does exist unperceived. It may perfectly well be true *both* that our perceptions are regularly connected, *and also* that matter exists unperceived. That Herr Cornelius should suppose the contrary is only to be explained by his commission of the gross fallacy exposed above.

But, as has been said, the method of 'analysis' is only a part of that 'epistemological' method upon which Herr Cornelius relies, and which he recommends as the only valid philosophical method. The philosopher must, he thinks, not only analyse 'the psychical facts, which are directly presented to us in our developed life' ; he must also answer the question of *origin*—the question how 'the more complicated phenomena are built up out of the simpler' (p. 169). The only valid philosophical method consists in a 'purely empirical investigation of psychical facts' (p. 164) ; but this must include not only present facts, but also the history of their development ; it must, in short, be 'a universal investigation of the mechanism of our knowledge, a natural history of human thinking' (p. 162). And it is, in fact, to the investigation of the *origin* of the naturalistic conceptions, rather than to their analysis, that Herr Cornelius devotes the greater part of his attention. The second part of his book is, in the main, a study in the genetic psychology of these conceptions.

Now the only definite information which Herr Cornelius gives us, as to the manner in which he conceives this genetic inquiry to be capable of supporting his philosophical conclusions, is that he thinks it can tell us what our conceptions really are—in other words, is an aid to analysis ; he repeatedly insists that a knowledge of the *origin* of our conceptions is necessary to make us grasp their *meaning* (pp. 168, 169). And it is, in fact, upon his inquiry into the *origin* of our conception of objective existence, and *not* upon direct analysis, that he relies for the proof of his proposition that it is a conception of regular connexion between perceptions. We may, therefore, test the value of his genetic method by considering its bearing upon this particular conclusion. Now, if that method is to give this conclusion, the argument must be as follows :

The origin of our conceptions being what it is, it can have given rise to no other conception of objective existence than that of regular connexion between our perceptions. But, as we have already seen, this conclusion is false; Herr Cornelius must himself admit that we actually have another, quite different, conception of objective existence, that, namely, which Materialists and Naturalistic Dualists apply to matter, and, as he thinks, apply to it falsely. But, if we actually have this conception, plainly no history can prove that we have not got it. On the contrary, its existence proves that Herr Cornelius has made some mistake in his history. Either it is not true that the origins of our conceptions are such as he thinks them, or else it is not true that these assumed origins can only have given rise to a conception of regular connexions between perceptions. The genetic method is, therefore, plainly unable to serve the only purpose which he tells us that it does serve—that of proving that our conception of objective existence is merely a conception of regular connexion between perceptions; and in what other way it is capable of supporting his philosophical conclusions, he does not tell us, and it is not easy to see. Herr Cornelius has given us a history, which may or may not be correct, of the development of our conception of regular connexion between perceptions; and, if it is correct, it may be a valuable contribution to genetic psychology; but, in any case, it appears to be totally irrelevant to his philosophical conclusions.

In the second part of his book, then, and by his own epistemological method, Herr Cornelius entirely fails to prove his main position that matter exists objectively in the sense that our perceptions are regularly connected and *in no other*; his arguments appear to be merely fallacies. But in the first part of his book he does bring forward some other arguments against the view that matter exists objectively, in the sense in which the Materialist and Naturalistic Dualist suppose it so to do; and these it remains to consider.

These arguments do not occur in his treatment of Materialism. Understanding Materialism to deny the existence of mental facts, he justly considers the existence of those facts to constitute by itself a sufficient objection to the doctrine. It is, therefore, in his treatment of Naturalistic Dualism that we find his arguments against the objective existence of a material world. He holds that a dualistic view involves four insoluble difficulties, which he calls 'Problems of Mediation,' *i.e.*, difficulties with regard to the relation of mind and matter; and the arguments which we have to consider constitute the first three of these supposed difficulties. The arguments are two: (1) That since, upon the dualistic view, the nature of our perceptions depends not only upon the nature of the material object which we are supposed to perceive, but also upon that of our sense-organs, it is impossible that our perceptions should give us a correct idea of the object in question; (2) that, upon the dualistic view, perceptions must be caused by material changes,

and conversely the will must cause material changes, and that this supposed causal relation between mind and matter is in both cases 'unintelligible' (pp. 65-69).

The first of these arguments obviously depends upon a very simple fallacy, namely, upon the supposition that the object perceived must be exactly similar to the cause of perception. Herr Cornelius even speaks of the perception as actually *composed* of what he is pleased to call the 'objective' and 'subjective' 'factors' (the material object, that is, and the nature of the sense organ), upon which the dualist must hold its causation to depend. Hence he supposes that if the dualist could maintain that the perception of blue was caused by a blue object *alone*, and did not depend at all upon the sense-organ, then the object really might be blue; but that, since the perception does depend upon the state of the sense-organ, the quality perceived cannot possibly belong to the other supposed contributory cause. To this it need only be replied that there is no reason whatever to suppose that the object of a perception must be exactly similar to its cause; and that consequently the supposed difficulty in the dualistic position is no difficulty whatever.

As for the second argument, it is a very familiar objection to Dualism; and yet, here too, the difficulty seems to vanish as soon as we try to define it precisely. The words used will cover two quite separate arguments, both of which Herr Cornelius states quite distinctly, though he does not seem to be aware how distinct they are. (1) The first, which is that which he urges against the causation of sensations by material facts, consists simply in the familiar assertion that the causation of a mental fact by anything so utterly different from it as a material fact is 'unintelligible'. Yet if we consider what that causal relation is, which is all that the Dualist is bound to assert as holding between them, there seems to be nothing whatever in its nature to render it either 'unintelligible' or impossible that it should hold between two completely different kinds of fact. The relation asserted is merely that, whenever a certain group of material facts, A, exists, there will also exist, in a definite temporal relation to A, a certain mental fact B; so that from the mere existence of A, the existence of B, at a position in time having the given temporal relation to that at which A existed, can always be inferred. That such a relation should hold between an A and a B, which are entirely unlike in quality, is a perfectly 'intelligible' supposition; we can see what the supposition means; it appears to contain no intrinsic impossibility: and hence there would seem no reason why the question, whether the relation *does* so hold or not, should not be decided by an inductive investigation, of exactly the same kind as that by which we commonly decide whether a given fact is or is not the cause of another. Herr Cornelius's objection seems so far to be merely based upon the old prejudice that an effect must be similar to its cause. But (2) the second argument, which he urges against the supposition that a

material change can be 'caused' by a mental fact, has certainly a greater plausibility; and it is perhaps largely due to confusion with it that the first argument is so often used. It consists in the equally familiar plea that, according to the Dualist (and the man of science), every material change has a complete cause in some previous group of material facts; and that hence none can be caused by a mental fact. The plausibility of this plea seems to rest upon a real ambiguity in the word 'cause,' which leads us to suppose that a given effect can have but one 'complete cause'. We use the word not only (a) in the sense just given, to mean any fact or group of facts on which the effect always follows, and which, therefore, is sufficient by itself to justify us in inferring it: we also may mean by it (b) the whole of the facts existing at any given time, without the existence of which the effect would not have followed. Now if we use 'cause' in the second of these senses it really does follow that any given effect can have but one cause at any given time; and hence that, if every material event has a material cause, none can possibly have a mental one also. And hence, I think, we are apt to suppose that one effect cannot have two simultaneous causes in the first sense either. Our tendency thus to confuse the two meanings of cause, and to suppose that whatever is a cause in sense (a) is also a cause in sense (b) is increased by the fact that any *material* group which is a cause in sense (a) really is the only *material* group, existing at that time, which is in this sense a cause of the given effect: among material facts it is true that when we have found a group, upon which the effect always follows, this group must include the whole of the *material* facts existing at that time, without which the effect would not have followed; it seems that a given effect really cannot have two simultaneous *material* causes. Yet I cannot see that the second conception of cause has any necessary connexion with the first. There seems no reason why there should not be two (or more) simultaneous groups of facts, from each of which, by itself, the existence of a given effect may be inferred with certainty, and which are therefore, each, its 'complete cause' in sense (a); although, at the same time, since they always accompany one another, the effect would never occur, if only one of the two had preceded it. To put the point generally: It seems quite plain that each of two premisses may, by itself, imply a given conclusion, although, at the same time, the premisses mutually imply one another. In any case we may urge that Herr Cornelius has established no objection to Naturalistic Dualism by this argument, unless it can be shown *either* that the Dualist must hold *more* than that for every material event there is a group of material facts, upon the existence of which it will always follow, *or else* that this supposition is incompatible with his further contention that for some material events there is *also* a mental fact or group of facts, having to the events in question precisely this same relation which, by the supposition, some material group has to them.

I conclude, therefore, that none of Herr Cornelius's arguments

have any tendency to support his view that matter does not exist objectively. But that view might possibly be a just one notwithstanding; and in order to consider whether there is any probability of its being so, it will be well briefly to notice some other consequences of that main position upon which he relies for a confirmation of it.

We have seen that Herr Cornelius identifies the conception of 'objective existence' with the conception of a 'regular connexion between our perceptions'; and that, by this identification, he becomes guilty of a gross inconsistency, since he also holds that there is a sense of 'objective existence' in which matter does *not* exist objectively. But this is not the only inconsistency of which he is guilty, in so holding; for, whereas he infers from his identification that *matter* does *not* exist objectively in any other sense than that our perceptions are regularly connected, he admits that *other minds* may exist objectively in some other sense. With regard to other minds he holds, in fact, not that they do not exist objectively, but merely that we cannot *know* whether they do or not. "Science is," he says, "as wholly unable to give a decisive answer to the question whether other minds exist or not, as to the question whether we shall continue to live after our death" (p. 322). The 'solipsistic' view can never be refuted 'empirically' (p. 323), that is to say, by what Herr Cornelius holds to be the only valid philosophical method. In short, Herr Cornelius's position is that we can know nothing but our own perceptions and the 'regular connexions' between them: "in the knowledge of these regular connexions," he says, "consists all that we know and ever can know of the world of things except the immediately given appearances themselves" (p. 271). From this position he infers, as we have seen, in the case of matter, that it does not exist objectively, and, in the case of other minds, that we cannot know them to do so. That the first inference is wholly unjustifiable is obvious. And if, as I shall hope to show, the second, though it follows from its premiss, yet contradicts the supposition that we know that premiss; if, as will then appear, our knowledge of the existence of other minds is as certain as our knowledge that we know our own perceptions; then certainly the position that we not only *can*, but do, know the objective existence of matter, will appear in a not unfavourable light.

Herr Cornelius holds, we have seen, that the existence of other minds is wholly inaccessible to 'empirical' and 'scientific' proof. But he has apparently failed to observe that the premiss, from which he correctly infers this conclusion, a premiss which he does claim to have proved empirically and scientifically, is that *we* know nothing but our own perceptions: that *several* minds, at least, and not one only, are in this awkward position. Now this is a proposition which, if it were true, Herr Cornelius himself could not possibly know, since his own is one of the minds which know nothing but their own perceptions. He holds, in fact, the two

mutually contradictory propositions : (1) It can be proved scientifically that several minds exist and know only their own perceptions ; (2) It cannot be proved scientifically that any mind exists except one. In order to avoid this contradiction, he might perhaps allege (though the allegation is plainly contrary to the facts) that when he says, '*We* only know our own perceptions,' he is speaking loosely and really means only '*I*, and other minds like mine, *if* there are any'. But even if this allegation were true, he would still be guilty of an equally grave inconsistency. For, as we have seen, the method by which he professes to prove that he only knows his own perceptions is the method of genetic psychology : that is to say, he infers it *from what happened to other minds than his own*, before he existed. Hence, if it cannot be proved scientifically that other minds existed, the premisses of his own conclusions are propositions which cannot be proved scientifically ; and consequently the whole of his conclusions, including the proposition that he only knows his own perceptions and the proposition that the existence of other minds cannot be proved scientifically, are themselves as uncertain as the existence of a future life.

It is plain, then, that the existence of a plurality of minds must be at least as certain as any theory about the nature of *our* knowledge. Any theory of knowledge which casts a doubt upon our knowledge of the existence of other minds, thereby destroys its own credit ; for, if it proves that the existence of these is doubtful, it proves that it is itself doubtful in an equal degree. That is to say, our knowledge that other minds exist is at least as certain as our knowledge that *we* know our own perceptions. But to grant this is to grant that I can know, with this same certainty, that certain things exist objectively, even when I do not perceive them. And if it must be thus consistent with any true theory of knowledge, that I should know this with regard to other minds ; then plainly, so far as the theory of knowledge is concerned, it must be equally possible that I should know it with regard to material things. The same false theory of knowledge, which leads Herr Cornelius to deny that matter exists unperceived, would lead him, with equal reason, to deny that theory of knowledge itself.

I have dwelt at such length upon the above points, because they appear to form the main thesis of the book. It is upon introducing the student to these doctrines—to his method of 'empirical analysis of psychical facts' and to his conclusions that we know nothing but the regular connexion of our own perceptions and that matter exists objectively in no other sense—that Herr Cornelius seems to think that the usefulness of his book mainly depends. And certainly, but for these cardinal doctrines, almost every detail in the book would appear in a very different light from that in which he presents it. It would seem, therefore, that no criticism of the book could well be so pertinent as the proof that these very doctrines involve us in the grossest inconsistencies.

There is, indeed, one other discussion in the book, which it would

have been well, for similar reasons, to consider at length. This is the discussion of causal laws and their justification—that 'orderly connexion' of which we have heard so much. For a 'clear insight' into this subject Herr Cornelius acknowledges our indebtedness to Kirchhoff and Mach. But even to state clearly in what this 'clear insight' consists, would require almost as much space as I have already occupied.

To 'Dogmatic' Idealism Herr Cornelius's objections may be briefly indicated.

To its 'Rationalistic' form they are in the main two, which follow naturally enough from his position, namely (1) that Rationalists deny the reality of our sensations—depreciate the 'sensational' element in knowledge; and (2) that they maintain the objective existence of other things in the same sense in which the Materialist maintains that of matter.

To the 'Sensualists,' on the other hand, his main objection is that they overlook the existence of 'thought'—that is to say, the knowledge of *relations between* sensations, as distinguished from the mere sensations themselves; and that hence they deny those 'regular connexions,' which constitute our knowledge of 'objective existence'. It is in bringing out this distinction between sensations and the relations between them—in pointing out, for instance, that to have two like sensations is not the same thing as knowing that they are like—that the best part of his work consists.

G. E. MOORE.

Kant. Sechzehn Vorlesungen gehalten an der Berliner Universität.
VON GEORG SIMMEL. Leipzig: Duncker & Humblot, 1904.

SINCE the publication of the late Dr. Adamson's *Shaw Fellowship Lectures*, in 1879, there has appeared no more suggestive book of like compass on the Philosophy of Kant than this excellent little volume of Prof. Simmel's. It consists in substance, though with many additions and expansions, of a course of lectures, delivered at Berlin in the Winter-semester of 1902-3, to which students of all faculties were invited. The author expresses the hope that it may serve as an introduction to philosophical thinking generally. Whether the Kantian system was a happy selection for this purpose is open to doubt, but Prof. Simmel has, at all events, produced a work that will be of considerable help to those who are not new to the subject and are able to appreciate a fresh and original treatment of it. The plan he has adopted is as follows. After two lectures dealing with the characteristics of Kant's *Weltanschauung* as a whole, and its relation to empiricism on the one hand and abstract rationalism on the other, five lectures are devoted to a discussion of the Critical theory of knowledge, the main features of which are presented in an order of sequence somewhat different

from Kant's own, which hitherto has been almost invariably adhered to by his expositors. Then come seven lectures on the fundamental conceptions of the Kantian Ethics, which are unfolded in an instructive and interesting way and subjected, at the same time, to some acute and forcible criticism. A further lecture is occupied with the leading principles of Kant's analysis of the apprehension of beauty, and in a concluding lecture an attempt is made to estimate the significance of the Kantian mode of thought in reference to what is called the "new individualism" of the latter part of the nineteenth century.

Prof. Simmel lays stress, at the outset, upon the distinctive trait of intellectualism running through the whole of Kant's philosophising, and upon his prevailing tendency to treat the norms which are valid for thought as valid also in every department of human life. Whilst feeling and volition receive from him due recognition as factors of the finite mind, their worth and value are regarded as solely dependent upon their conformity to the conditions of logical consistency. The Critical Philosophy is perhaps the most perfect example in history of an endeavour to carry out the work of speculation through strict observance of the laws of the game. Kant never wavers as to the supreme position of reason in experience, never hesitates in his belief that the problems which reason sets for itself must have a solution in terms of reason, even though we may be compelled to reject *in toto* that transcendent use of the categories, which ordinary intelligence too readily makes. And, as Prof. Simmel justly observes, the doctrine of the "primacy" of the practical consciousness, rightly interpreted, is quite in keeping with the general drift of Kant's reflexion. For the "postulates of the practical reason" are not arbitrarily assumed hypotheses, conjured up to meet the needs of some ultra-rational faith, but assumptions necessarily demanded by reason itself in the effort to conceive the possibility of even an approximating realisation of the moral end. It is, that is to say, a logical necessity which compels us to represent the realm of reality in such wise that it shall afford scope for the mode of action characteristic of a rational being, of a being, namely, capable of determining its conduct solely on grounds of reason.

Kant's epistemological inquiries group themselves round the determination of the conditions of objectivity in Knowledge, and Prof. Simmel has followed a sound method of exegesis in formulating the fundamental question at the start. Unless this be done, the student is apt to lose his way in the midst of the numerous preliminary considerations by means of which Kant approaches his central problem. Our author's rendering of the Kantian solution of the problem may perhaps be gathered from the following passage: "When we are framing a sentence, we apprehend the words, no one of which conveys the meaning in itself, as related to one another, as belonging together, and in this unity the mere material of the words, without any quantitative change, ac-

quires the form of the sentence, etc. In short, what we call form is, from the point of view of the function it subserves, the unification of the material; it is the overcoming of the isolated *Fürsichsein* of the several parts, the whole of which parts, as a unity composed of the parts and transcending them, is now opposed to other unformed or differently formed material. Such is the essential connexion in which Kant, by analysing the perceived world into material and form, can finally discern in the unities, which are constituted out of the multiplicity of the given data, the point of reference for all recognition of such world. A given manifold of sense, of imagination, of thought, becomes a fact of knowledge by being formed, that is, unified, by growing together into a consistent meaning. It is this unification that first creates out of the material in question an *objective* image. The sensations produced by sunshine and the feelings of warmth that follow them are, as such, events that occur one after another in my subjective consciousness only, and in so far do not yet yield anything in the way of knowledge. When, however, the judgment ensues, the sunshine is the cause of the warmth, then the two notions contained therein have passed out of a mere succession and have entered into a unity, one unifying process holds them together,—and, precisely on that account, they are objectified, and, instead of the contingent play of my sensations, a real relation of elements has supervened, which is independent of all that is merely subjective" (38-39). The vital point in the "Deduction of the Categories" is here well and tersely put; the gist of the Kantian argument consists no doubt in ascribing to conjunction or synthesis the function of producing that peculiar component in the object, which constitutes it, apart from its special concrete filling, an object at all. But it is perhaps even more important to make clear the particular kind of synthesis involved than to lay stress upon the consideration that synthesis of some sort is indispensable. I cannot avoid the impression that Prof. Simmel's mode of interpretation indicates far too mechanical a process to do justice to Kant's conception, although it is true the analogy used in the above extract ought to have been a safeguard in this respect. Synthesis, namely, in Kant's sense, is just as little a mere bringing together of parts as the meaning of a sentence is an aggregate of the words that compose it; the parts of the manifold in the act of apprehending are one thing, the parts of the object apprehended quite another. By no combination of parts not in themselves involving the unity of knowledge could there, on the Kantian theory, be given to the whole which might thus be constituted that unity which is the characteristic mark of the object known. The synthesis, in other words, which Kant had in mind, is itself the very act of knowing, and the bringing of that synthesis to notions is, as he expresses it, the work of the understanding. Prof. Simmel seems to discover in the reciprocally determined relation of the parts themselves a sufficient explanation of objectivity. "Objectifying signifies," he

says, "the fixing and securing" of the diffused materials of sense, and the materials of sense mutually guarantee this 'fixing and securing' by virtue of their unification (40). For Kant, however, that which steadies, or gives stability to, the wandering manifold of possible intuition is surely the universal and necessary character of the *a priori* factors implicated in the synthesis. The *Gegenüberstellung* of that which is known, its *Entfernung*, to use Prof. Simmel's phrase, from that which knows, whereby it is independent of the accidents of our subjectivity and our will (42), Kant would attribute to those universal rules or necessary laws, which are the ways in which thought is aware of its own unity in the act of combining a manifold. In contrast to the changing mental states of the finite subject, the object assumes a position of permanence, because the features in it, constituting its objectivity, are the correlate or counterpart of that permanent transcendental self, which is the ultimate ground of experience generally. That the object *stands over against* the finite subject means, then, that in the process of knowing the finite subject is under a *constraint*, and that knowledge on its part is only possible through conformity to the conditions of *Bewusstsein überhaupt*.

It is but to put what has just been said in a slightly different manner to assert that, according to Kant, universality and necessity are not the consequences of connectedness in phenomena, but that conversely connectedness in phenomena is the consequence of universality and necessity. Prof. Simmel appears to lend his countenance to the former of these alternatives, and to think that in doing so he is following in the footsteps of Kant. Kant, he points out, relinquishes the hope of finding a principle of unity in some ultimate metaphysical reality, be it matter, spirit, substance or what not, and in so doing strikes out a new path for philosophy. So soon as the principle of unity is sought, not in the unapproachable inner being of things, but in the systematic representation of them which scientific knowledge enables us to attain, and in the context of an experience which attests itself as valid—then, it presents itself, not indeed as a completely realised fact, but as a reliable form or scheme, which our growing insight is constantly filling up with detail, and which serves as an ideal even where gaps and errors obscure our view. The spiritual essence, which Plato hypostatized into a rigid metaphysical substance over against the unwillingly recognised realm of sensuous existences, manifests itself to Kant as the *system* of natural laws and of the phenomena which they render intelligible. Thereby the world is no doubt intellectualised but not engulfed in subjectivity. There can be no more objective standpoint than that which looks upon reality as identical with scientific truth. It is not any representation to consciousness but that only which has stood the test of intellectual scrutiny and established its validity as a necessary part of experience which takes the place for Kant of being, in the naïve or metaphysical sense of the word. For science, indeed, nothing is necessary in

and for itself; a thing is necessary only through its regular connexion with something else, whose reality is admitted, this again is necessary only through the former or through a third thing with which it is regularly connected, and so on *ad infinitum*. So conceived, all experience is, as Kant expressed it, an "Inbegriff"; there is only one experience the parts of which are so united as to form a self-consistent whole; there is only one way in which the nature of things can be intellectualised and included in the fabric of a valid experience, a cosmos not of existence but of knowledge (73-79). With a good deal of what I have thus imperfectly summarised there is no occasion to quarrel. But the underlying assumption on which it proceeds, that the transcendental self is a mere formal unity, the meeting place simply of the elements of the knowable world, seems to me to be carried by Prof. Simmel to an extreme, from which Kant himself would have recoiled, and with which it is impossible to reconcile the more constructive portions of the *Critique of Pure Reason*. That assumption leads Prof. Simmel to throw the whole weight of reality upon the side of the empirical elements. Yet no one has insisted with more thoroughness than Kant that the raw material of intuition, unqualified by thought, is just as much an abstraction as are the pure notions of the understanding, unqualified by sense. If the transcendental self is unreal apart from the multiplicity of phenomena, so is the multiplicity of phenomena apart from the transcendental self. In attempting, then, to disentangle the contributions of each to the concrete whole of experience, no purpose is served by a too rigid insistence on the literal meaning of "form". "Formal" gets its significance for Kant as antithetical to "material"; no further implication of "mere potentiality" attaches to it than attaches also to its correlative. The careful expositor of Kant has here to steer his course between Scylla and Charybdis, between hypostatising the pure ego into an entity fully organised and equipped with faculties, and thinning it away to a mere "Punkt, in dem alle Elemente der Erkenntniswelt sich treffen" (75). That Kant himself failed in this undertaking must be conceded, but his failure did not result in his reverting to a phenomenalism framed upon the model of Hume's. Self-consciousness remained for him the ground of the phenomenal world and its categories constitutive features therein.

I can only briefly allude to one or two of the many suggestive lines of reflexion followed by Prof. Simmel in discussing the ethical doctrines of Kant. He argues (101), with much cogency, that the categorical imperative furnishes only a negative and not a positive criterion for practical conduct. If it be granted that the principle of every immoral action, when thought of as a universal law, is beset with inherent contradiction, it does not follow, on that account, that a principle of action which is self-consistent is morally necessary. In fact, the criterion of self-consistency is altogether without significance unless an idea, event or condition

is already presupposed as morally valid. That the individual may end his life at his own discretion I cannot will should become a universal law, because such a law would involve the ceasing to be of nature. But if I am a pessimist and look upon nature as an evil, then suicide is in no sense a self-contradiction. Moreover, even with the proviso above mentioned, the criterion, contends Prof. Simmel (105), is absolutely unavailing for the numerous situations where particular interests and obligations conflict, since we can never know *a priori* which are the elements the principle of our action in regard to which should be universalised, and which are the elements that are negligible as of no moral bearing. Accordingly there remains no other mode of applying the criterion than that of taking the whole of the circumstances into consideration and, with them all in view, to ask whether we could will a specific action as a universal norm. No answer, however, could be obtained to this question that would furnish any ground for moral decision. Either it would appear that other consequences would follow than in my individual case (as, for instance, where it might be morally justifiable for one person to take a risk upon himself which it would be morally unjustifiable for a number of persons to do), and then no universal law could be framed, or else that the consequences of similar actions on the part of all would be exactly similar, and then the universal law would give no further guidance than could be derived from my individual case as such. Prof. Simmel holds that the insufficiency of the categorical imperative thus brought to light indicates what is perhaps the deepest moral problem of our time. Since the individuality of the agent has come to claim for itself a wider range of determination than Kant recognised and to treat any formal moral principle as indefinitely elastic and variable, the question arises whether it is not an error to require that a rational agent should always seek to conform his conduct to a general law. Whilst such a law cannot altogether be dispensed with if there is to be any objective ground of morality at all, modern life is reaching forward, he thinks, towards what for Kant would have been a *contradictio in adjecto*, the conception, namely, of a law that shall be essentially valid for the individual as such, the expression of that idea of the mutual furthering of personal individuality which has gradually taken the place of the eighteenth century idea of equality. The qualitative character which Kant ascribed to the moral will, its unconditional antithesis to everything that is aimless, subjective, capricious, must, indeed, still remain intact; the authority, the dignity, the necessity, all, therefore, which is included under the notion of worth, must still be comprised in those particularisations of the general law which responsible personalities fashion for themselves.

Prof. Simmel goes on to discuss the Kantian conception of "pleasure" (116 *sqq.*), and has much to say that deserves attention upon the attempt to reconcile the opposition between duty and

happiness through the "entirely new category," appearing at the end of the *Critique of Practical Reason*, of "des Glückes würdig zu sein" (120 sqq.). He handles, also, with courage and skill, the problem of freedom, and the regulative significance of the ideas of God and immortality (125 sqq.). Finally, in the brief but suggestive treatment of the faculty of æsthetic judgment (155 sqq.), the author develops the dictum that æsthetic enjoyment of an object is wholly independent of the existence of the latter, a consideration often lost sight of by commentators of Kant, but one that perhaps admits of more far-reaching consequences than are apparent on the surface.

It is curious, though explicable, that Prof. Simmel should bring his book to a conclusion without any reference to the second part of the *Critique of Judgment*. Apart from the teleological principle and the attempted reconciliation of mechanism and freedom, the Kantian edifice is left standing incomplete, and certainly the full bearing of the whole system cannot be gauged. If Prof. Simmel should some day supply the missing sections he would increase the value of an exceedingly useful work, which might profitably be translated into English. And may one venture also to add that a good index and table of contents would assist the progress of the reader?

G. DAWES HICKS.

Adolescence : Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion and Education. By G. STANLEY HALL, Ph.D., LL.D., President of Clark University and Professor of Psychology and Pedagogy. New York : Appleton, 1904. Vol. i., pp. xx, 589 ; vol. ii., pp. vi, 784.

PROF. STANLEY HALL calls this work his first book, and, in a technical sense, it may be ; but his name is so well known among all the exponents and students of Child-Study throughout the civilised world that the statement brings with it for a moment a shock of surprise.

We remember his many papers, his interesting monographs, the collected German edition of his essays on Child-Study, and, above all, his constant stimulus, suggestiveness and encouragement to the work to which he is devoted and which owes so much to him. He now increases our obligation by a big book on *Adolescence*, a term which seems to have a wider meaning in America than in England, since all problems of birth, growth and development from the dawn of life to maturity seem to find a place.

Perhaps the first feeling of the English reader is astonishment at the widely spread interest which, in America, enables such a work to be written and published. Merely to count the names of

the American men and women whose researches have been quoted or drawn upon would be a formidable task. And such a publication, with any hope of success, implies a considerable public with interest in and capacity for sociological problems. In England such a book could not have been written, the materials which constitute it are not in existence, and to us it will serve as a valuable storehouse of fact, statistical and other, on most of the many problems involved in birth and growth. To me, therefore, it seems unfortunate that the author should spend time in emphasising his differences with modern philosophy. It is all epistemology now, psychology has no longer a soul, be it my task to bring in "genetic ideas of the soul" which shall be "new both in matter and method". Thus, in effect, the author. He echoes the dictum of the practical man to whom a philosopher is a person who lives apart from humanity and so knows nothing of real life. This criticism reads strangely to those who know that the development of philosophy in England has, for some time, been predominantly practical, and that its extension in that direction is largely due to the epistemological bias which the writer deprecates.

Psychology cannot be "broad enough to include all the philosophic disciplines," though every philosophy has its psychological side. And is not what might be called the bias of child-study more marked than is desirable? All of us are prone to value highly what we are personally most interested in, and it often happens that the psychologist of the primitive comes to value the immature and naïve simply for the sake of its immaturity.

"Our consciousness is a late, partial, and perhaps essentially abnormal and remedial outcrop of the great underlying life of man-soul. The animal, savage and child-soul, can never be studied by introspection. Moreover, with missing-links and extinct ethnic types, much, perhaps most, soul-life has been hopelessly lost." It is now Prof. Hall who is depriving us of soul, though it is rarely conceived as specially characteristic of "missing links".

Nor need the author be closely followed in his antagonism to introspection. No experimental results can be truer than the units in which they are calculated, and correct and fertile units involve analysis and introspection of the highest order. Experimental work is often itself introspection under definitely assignable external conditions, and only by an analysed and projected self can we hope to understand the psychology of other minds. Some workers are more competent in the intensive treatment of individual problems, others do better work on a large scale with units more roughly conceived; but such various workers are really complementary and not antagonistic, though they sometimes dislike each other. But perhaps Prof. Hall would readily admit all this, and only wishes to guard us against putting ourselves, in too literal a fashion, in other people's places,—a process as dangerous psychologically as it is doubtful ethically.

There is, I think, some confusion between the normal and the

normative. It is very necessary indeed that we should know by careful observation and measurement what are the normal figures of our growing population. But we must not, having struck our average, straightway announce to all and sundry, like the automatic weighing machines, that that is what they *ought* to weigh.

The undue stress on the efferency of all mental process favours the view that education should be mainly concerned with making and doing, an ultra-Froebellianism which in England is largely discredited, and which has, by a backward wave, discredited the psychology from which it sprang. Activity—the purposive solution of problems however simple—is doubtless the key-note of all mental life, but mental activity is often hindered, not helped, by bodily activity. The error is parallel to that which defines attention as an adjustment of sense organs, and is even more dangerous educationally.

Prof. Hall thinks that the early training of children is not, in many ways, mechanical and dogmatic enough; he holds the race-recapitulation theory with logic which Spencer missed. But, in a few pages farther on, we are told that American education “by dogma and hyper-sophistication tends to exterminate the naïve which is the glory of childhood”. I was puzzled for a moment by the apparent contradiction, but I have long been of opinion that the dogmatic and the rational have each been both overdone and insufficiently done, at any rate, in English education. With us, roundabout, elaborate, highly rationalised and exhausting methods are adopted to teach English reading and spelling. Precious hours are wasted in junior classes in trying, and naturally failing, to teach the theory of arithmetic before allowing the children to do sums. On the other hand, a foreign language must be taught parrot-fashion, and a definite logic cease to be required in geometry. So that the apparent contradiction of the writer forces most valuably into prominence a question which the pedagogy of the immediate future must face. It must cease talking vaguely of mechanical and intelligent, and tell us where, exactly, intelligence and where, exactly, mechanism are in place.

Prof. Hall thinks that science and theology should cease to stand apart and should rather complement each other, that clergymen should not suspect the study of nature; and he is optimistic about the world, because, being an evolutionist, he holds that the best must prevail. The theologian has some excuse in modern times, if not to suspect the scientist as such, at least to suspect the scientist turned philosopher, for the latter strives to prove the complete inutility of the theologian's studies; and it was not a theologian who said:—

Are God and Nature then at strife
That Nature lends such evil dreams?

Now, doubtless, evolution has acquired its great popular fame by the vague promise which it seemed to contain that things would be

all right by-and-by. But, except in popular literature, is there any justification for this? The fittest survive, doubtless; but fittest for what? The answer is: For survival under given conditions. But has this not, both in human and in animal life, often implied degradation? And even Mr. Spencer, who sometimes does write in language which leads the unwary to deify evolution, speaks of retrogression and dissolution as inevitable. And, on Prof. Hall's own showing, optimism needs a brave heart, since, as he says, "There is not only arrest but perversion at every stage, and hoodlumism, juvenile crime and secret vice seem not only increasing, but develop in earlier years in every civilised land".

Prof. Hall gives copious extracts; he quotes, in full, figures and opinions on every side of the question he is discussing, and sometimes himself seems to veer round in accordance with the particular piece of work he is considering. This makes the chapters very long, and one is sometimes tempted to wish that the writer had presented us with conclusions rather than summaries. But in the present state of anthropology the course he has adopted is better, for the book remains of value even to those who differ from the majority of the propositions advanced; for Prof. Hall quotes frankly and freely against the views which, one feels, he holds himself. 'Judicial summings-up' can be left till later.

From a long chapter on "Growth in Height and Weight" we learn that the higher the species, the more rapid, relatively, is the transit through the lower stages, but this is, of course, simply a corollary from the doctrine of evolution plus recapitulation; and that women more nearly attain the stature of men among savages than among civilised races. Our athletic young ladies with free-swinging limbs and beautiful, clear, penetrating, loud voices (as Mr. H. G. Wells describes them), may, after all, be a reversion. Further, we are told that growth and work, whilst mutually helpful up to a point, become antagonistic beyond it; that growth proceeds in steps, so to speak, and not in a gradual ascent; that genesis and individuation beyond a certain point are in inverse ratio. Clearly we cannot ultimately push individual growth beyond the possible procreation point. And of the other dicta, though profoundly interesting, it can hardly be said that they are new. We have now to determine more definitely the limits of their application. As an interesting detail I might mention that the London County Council minor scholars are larger, age for age, than the American children.

In another chapter on "Parts and Organs during Adolescence," the author says that a very great number of the craniological measurements sometimes insisted on seem, at present, little more than an affectation. With this opinion I cordially agree, and have had occasion to remark the same with reference to the entrance examination to schools for the mentally defective.

A serious discussion as to exactly what is implied by precocity would have added value to this section of the work. It is not

enough to use the term, as we all do, to condemn any early growth which we dislike. "Each lower level must have its full development, for it is the necessary condition for the unfoldment of the higher." This is conclusive against precocity were it true, but it makes the rapid transit dictum rather hard to understand and completely neglects evolution by atrophy. It may be, of course, that we ought to seek to reverse nature's steps, but an optimistic evolutionist can hardly hold that view.

Again, in this section we have a pregnant saying on that little-considered subject—the antagonism between individual development and heredity. "If the reproductive parts are subnormal, race deterioration is certain, no matter how complete in other respects individual development may be." These warnings come opportunely at a time when an American President fulminates against race suicide, and are not without use in London where the birth rate shows a marked and continuous decline. Perhaps the most questionable thing in this chapter is the assumption that acquired traits are hereditary; it should at least, in the present state of knowledge, be treated as an open question.

Another chapter contains many interesting observations on the growth of "Motor Power and Function". "Muscle Culture develops brain centres as nothing else yet demonstrably does." This is said with a view to claiming a place in education for muscular training; but does it not prove too much, and how is it itself demonstrated? And which brain centres does it develop? And at what expense to the others? These are questions to be answered, but not to be answered by a mere assertion of the supremacy of muscle culture as mental pabulum. The whole chapter to me is marred by an ultra-physical view. We must, we are told, cultivate all movements to which there is any spontaneity in order to avoid the atrophy of disease. But may not we have atrophy without disease? And why should these movements not atrophy unless we need them and desire them? Why should we exercise all the muscles of the body? Only, it seems to me, for reasons of utility or æsthetics and not simply because we happen to be born with them. Nor should I have thought that Prof. Hall would have adopted this view, as he is in sharp antagonism to Prof. Groos's theory of play, which activity he regards, as I do, as biologically recapitulatory rather than anticipatory. There is, too, a danger that a theory of Inhibition, couched in imagery too physiological, may be harmful to the psychological concept which it purports to explain. Inhibition, as we all know from personal experience and analysis, is not a mere drafting off of energy by employment in other ways. It is positive and not merely negative. Let us but for one moment relax attention and let our minds wander and straightway the inhibited thought or action flashes into being.

It is useful to be reminded that man's "various organs and functions are evolving or retrograding to some extent independently of each other". It is this fact which gives whatever value

there may be in a faculty psychology, and makes a psychology based on a unitary soul or subject so formal and unfruitful.

In his treatment of "Juvenile Faults," Prof. Hall seems to be oscillating between a belief in repression and one in indulgence, but, doubtless, this arises from the highly comprehensive treatment which the subject receives. I select one valuable sentence for quotation.

"Although pedagogues make vast claims for the moralising effect of schooling, I cannot find a single criminologist who is satisfied, whilst most bring the severest indictments against it for the blind and ignorant assumption that the three R's or any merely intellectual training can moralise."

Mr. Spencer, from the standpoint of analytical psychology, said this long ago, and the steady increase of juvenile crime with popular education supports the judgment.

Chapter xvi. is of special interest to all those who wish education to be something more than a codification of rule of thumb precepts handed down by tradition. Prof. Hall thinks that it is of little educational value to know "the name of a spade in several different tongues"; that the "ghost (of grammar) now lacks just the quality of logic which made and besouled it"; that "in modern pedagogy there is an increased tyranny of things, a growing neglect or exclusion of all that is unseen"; that the modern American school is producing a "lapse toward infantile or animal picture-thinking"; that, quoting the Chicago work, "rote memory is most powerful in the ablest school pupils"; that, quoting from Mr. Sadler's Reports, "nothing is more striking to the English visitor in American high schools than the comparatively elementary nature of the work done in the highest form". Prof. Hall concludes a striking and vigorous chapter by claiming, as finally necessary to a good education, some instruction in general philosophy which should give an account of life looked at in its broadest issues. He seems to have in mind something like what Mr. J. B. Crozier has when he speaks of the History of the Evolution of Civilisation.

One more section, and one only, can be referred to here, a most valuable chapter on "Adolescent Girls and their Education". The upshot of the whole matter is that college graduates, men and women, are so deficient in offspring that, were the up-keep of the population left to them, the American would soon disappear. Many of us, who embraced family limitation to raise quality where quantity was unnecessary, find the basis of our hope cut away by the studies on single children and small families which, it seems, differ unfavourably in quality as well as in quantity, when compared with large ones.

And finally, I can only say that I have spent many hours in delighted perusal of these large volumes, and that no one who values sociological studies on the side of Child-Study can fail to find them of very great value.

W. H. WINCH.

Geistige Strömungen der Gegenwart: Der Grundbegriffe der Gegenwart, dritte ungearbeitete Auflage. Von RUDOLF EUCKEN. Leipzig: Veit & Company, 1904. Pp. 398.

THE *Grundbegriffe der Gegenwart* was published as long ago as 1878. Historical exposition formed the substance of this work; but in the second edition (1893), and still more in the present volume, everything else is subordinated to the advocacy of the author's philosophical convictions, which have meantime been ripening and bringing him into more conscious and energetic opposition to the German philosophy of to-day and the ideal of culture it represents. He is able to speak with satisfaction of the many friends his books have brought him, and of the sure consciousness he has of being in spiritual contact with the age, especially as expressed in the younger generation. He now prefers to speak of spiritual currents or tendencies rather than of concepts, to avoid the impression that he is dealing with purely intellectual processes or content with their decision. He conveniently escapes much criticism through a conception of the function of philosophy which enables him to dispense to a large extent with the necessity for grounds and proofs, since he reduces it to a symbolical expression of the Truth analogous to Religion, and incapable of expressing in concepts anything beyond the merest outline, which must be filled in with the help of artistic phantasy and creative intuition (p. 341). Where *real* problems are being discussed, he says, it is not logical or dialectical ability that triumphs, but the power of the spiritual concentration, the vital energies welling up in them. In all questions of principle and their consequences, each one is ultimately defending his own spiritual species; whence alone the power, warmth, passion of intellectual movements (pp. 57, 58). Thought is in general a living force only as a fragment, an expression of a new stage of life (p. 95). There is a world-historical Apperception, and no widening of knowledge apart from a widening of the sphere of human activity. Our knowledge has not made the world clearer, and it stands under such peculiar conditions that we are not justified in regarding it as absolute (p. 116). Intellectualism has erred in treating the life of man's spirit as the life of absolute spirit, and in reducing the world to the unfolding of a Cosmic Logic, with all the attendant shirking of the dark and inimical in the state of the world, with the sacrifice of the individual to the universal, of content to form. For the life of the spirit can in no wise be understood as a mere clarification of something active in external reality, or Nature reduced to a mere lower degree of the life of the human spirit. The contrast between Nature and the spirit of man lies within the life of the spirit. Prof. Eucken considers that his "deviation from dogmatic Spiritualism consists only in this recognition of two different points of departure, two working-points within the comprehending whole. . . . The life of man's spirit appears more incomplete, more involved in a struggle up-

wards. Man is summoned to act and decide for himself, he has to co-operate in the movement of the universe, not merely to arrange it in his thoughts. Not the intellectual, but the ethical becomes thereby the kernel of his striving" (pp. 180, 271). The movement in which he co-operates is that of a conversion of reality to its own inner life, the coming to itself of the world-process, the achievement of a being and a meaning as opposed to all the senseless contexture of relations and preservation of microscopic selves (p. 329). Prof. Eucken's *Lebenssystem* establishes Spirituality ultimately in an intelligible world transcending all human existence. This is the supreme power supporting and uniting all reality, and the constantly active source of the life of the human spirit. In part a mere continuation and portion of Nature, man at the same time exhibits new forces, ends and forms which combine to introduce a new Being opposed to everything that is mere Nature. Action resulting from free decision unites itself to that which is merely happening to him. If there is no such superhuman, supra-mundane spirit then empirical existence, with its chain of rigid necessity, is the only truth and the life of the spirit an illusion. To share in the life of the spirit means to share in a world-life raised above the opposition between subject and object, requiring nothing to complete it. There has to be a gathering together of life to a unity beyond the individual psychical activities, and a transference of the centre of gravity to this unity, so that these activities, directed upon the whole, lead to the evolution of a substantial life. Then there unfolds itself a universal activity working through these psychical activities and proclaiming itself in them, which forms an all-comprehending *Lebensraum* in which the manifold may meet and enter into relation, but which in itself unfolds a constant being and maintains it during all change of activity. Here man is not something added to the world, but in this deep ground he has his share: *Die Selbstbildung wird hier unmittelbar Weltbildung sein* (246-247). The division between subject and object is first overcome to some extent where that we undertake as our work becomes our vocation, a part of our being; and more fully in the stage of creation and of love. But the soul desires more complete independence in a life whose content and goal lies in its own realisation. In this the unity does not stand alongside things and fashion them for its own peculiar purposes: it belongs to the very nature of the things and brings them to perfection. The spiritual life knows itself to be at once the basis and pre-supposition as well as the goal and climax of the world-process. The chief endeavour of the spiritual life, then, is the attainment of Truth, and the more reality of existence the more Truth. The search for Truth is not the search for a knowledge of the world, but the pursuit of self-knowledge by the life of the spirit. The knowledge of Truth is bound up with the process of that life itself, giving it an historical character. The measure of life is here the measure of knowledge.

I believe that Prof. Eucken would accept the above, allowing for the unavoidable disadvantages of over-condensation, as a fairly accurate epitome of his *Welt- und Lebensanschauung*. That is not such a Heaven-born inspiration as some appear to think. When Schelling, in 1841, attacked Hegel's philosophy as incapable of entering into the relation with absolute reality demanded above all by religious faith, and sought to replace it by yearning and the act of will corresponding to a practical, personal necessity, he may be said to have started a powerful undercurrent of philosophical reflexion which has never lacked striking exponents. We know that Kierkegaard attended these lectures and glowed with enthusiasm when Schelling spoke of "Reality". From him streams an influence, potent in literature and not entirely negligible in philosophy, which certainly reaches down to Nietzsche and to Eucken. Eucken has Kierkegaard's insistence upon "*wesentliche Erkenntnis*," upon the inwardness of morality, upon the ethical all-importance of the individual. He shares his refusal to see any parallel between natural and spiritual evolution, opposing equally an irreconcilable "*entweder-oder*" to all smooth dialectical progression. He has with Nietzsche his disregard of historical and social considerations, at least to some extent. There are many and important points of difference, of course; but we may say that in Eucken a spirit akin to Kierkegaard and Nietzsche has become mellowed, patient and persuasive: at times even a little tame and rhetorical. As a critic of culture Prof. Eucken approaches the Nietzsche of the first period very closely. It is History, he says, that robs us of the power to fashion our own lives by estranging us from our own thoughts and responsibility through ceaselessly occupying us with things foreign to us: giving us learned knowledge for life. Nevertheless it is indispensable as a means of inter-subjective union, enabling the inner life to front the endless world encircling it so overpoweringly (p. 259). Mere social culture lies on the periphery of the life of the spirit: *Eine blosse Menschen- und Massenkultur echte Geisteskultur weit zurückdrängt* (p. 299). Great personalities are the masters, not the servants, of their age, who raise the life of the spirit out of a shadowy existence as merely universal concepts to full reality, characteristic unity and visible form, by bringing summations of energy into definite directions and forcing historical movements into individual paths (p. 297). For its origination the life of the spirit must have individuals, for its fixation society. Moreover, if in culture man is not to hang just any self-spun thoughts on to an alien reality, and so with his whole striving fall into emptiness, then the grounding of culture in an independent life of the spirit is indispensable. Good and True could never be absolute requirements if the whole movement took place in man himself and bore the impress of his specific features. The greatest of all emancipations is the emancipation of life from the merely human (pp. 243-244).

Prof. Eucken is always interesting as a critic, but he is too much

a man of one idea, and that idea extremely difficult to render even moderately intelligible. The independent life of the spirit is dinned into our ears on every second page, and yet I have sought in vain for anything like a *deduction* of the idea itself. Moreover, Prof. Eucken admits the difficulty of giving to the concept of a world-nature in man any very precise expression. Artistic creation furnishes for him the type of what he means. There we have a mutual interpenetration of subjective and objective in the soul of the artist, things receiving a soul and the artistic life a content. And he quotes with approval the saying of Goethe that in such a synthesis of world and spirit we have "*Die seligste Versicherung der ewigen Harmonie des Daseins*". Can that, he asks, which in Art is an incontestable reality not be true of the life of the spirit as a whole? This is a fine saying, but I did not know that Prof. Eucken was prepared to admit *die ewige Harmonie des Daseins*. According to him the given world is not merely not an evolution of the spirit, but opposed to it, the recognition of this fact marking the passage from philosophy to metaphysic (p. 104). How this opposition came about he nowhere explains, even symbolically; but all true spiritual life involves such a metaphysic, since it evolves itself, not merely in superiority, but in opposition to the world. Surely this is something Goethe would not have accepted. In fact, I do not grasp what Prof. Eucken intends us to understand by the relation of the independent life of the spirit, of which we hear so much, to the divided realm of Nature and Humanity. Is it as much in opposition to Nature as is the spirit of man? If so we are left with an absolutely hopeless dualism. If not the opposition of Nature to the human spirit must be due somehow to our imperfect relation to it, and we should not allow our imperfection to load it with hard epithets. Again is the independent spirit fully expressed, or susceptible of complete expression, in these differences? So far as I understand Eucken, the present world is not merely chaotic, but imperfect. There is a sort of descent of the Holy Ghost on the spirit of man to supply *his* deficiencies, but Nature is left to go on its way in brute opposition if not active antagonism to man. Now, what is meant by saying, that man's appropriation of things raises them to their own true perfection, if they are inherently imperfect? All talk about bringing forth the soul of things is merely figurative. Man's power to modify Nature does not extend very far on this earth, and certainly does not reach beyond it. Their soul could only be drawn forth by the same power that is increasing its revelation to man's spirit; the progressive creation of a new reality would in fact be a movement in the whole substantiality of spirit affecting the human spirit and Nature at one and the same time, and rather a fresh apprehension than a free appropriation by man: an effect, and not a cause. Prof. Eucken insists very strongly on man's freedom, while at the same time he distinguishes his position from Indeterminism. Man's spontaneity is not his deepest nature; he finds a content in

a world of actuality within which he has to understand his freedom. He is a contexture of freedom and necessity. Freedom is not of the individual points, but of the whole. It is the culminating point of an all-penetrating endeavour (pp. 372-375). Just so, it is, in fact, made up of the mechanism of Nature and the compulsion of spirit. To share in the life of the spirit, he says, is to have a fully active life, raised above every opposition, and bearing in itself the draught of an independent reality, towards the completion of which every movement is directed (p. 96). To be in earnest with the idea of a world still in process of creation, Prof. Eucken would require, it seems to me, to regard the spirit, not as having the independent, superhuman, supramundane life he claims, but as having sundered itself, once for all, into fundamental differentiations which are now in time finding their way back to that relation to one another whereby the unity which once existed for itself should exist for them. Something, perhaps a good deal, could be said for such a view; but Theistic prejudices forbid Prof. Eucken from imagining, as did Kierkegaard, that God himself is still in process, with a Being as yet incomplete. Prof. Eucken's creation of that which already exists in all possible fulness of perfection, however it may serve to fill up man's time, even if it were possible, certainly appears to be quite unnecessary. In fact, either the independence of the spirit is an illusion, or the process of creation a mere appearance.

DAVID MORRISON.

The Platonic Conception of Immortality and its Connexion with the Theory of Ideas. By R. K. GAYE, M.A., Fellow of Trinity College, Cambridge. Cambridge: University Press, 1904.

THIS Essay, we learn from the title page, obtained the Hare Prize in 1903, and it is, as we should expect, a contribution to that interpretation of Plato which prevails in the University of Cambridge. There can be no question that Cambridge has deserved well of Plato in more ways than one. In particular, Cambridge men have insisted that Plato had a coherent metaphysical system, and that, in the course of his long life, he developed and modified that system in some important points. Every one who takes his Plato seriously—and the number of such is happily growing—must feel that these two positions are sound. The trouble only begins when we try to formulate the metaphysics of Plato and to interpret the dialogues in the light of that. This is not the place for a statement or criticism of Dr. Jackson's views. They may be right or they may be wrong; but the fact remains that no other authority on Plato has yet been able to find in the dialogues the system or systems which Dr. Jackson finds there. Now, in the present Essay, Mr. Gaye adopts most of the conclusions of Dr. Jackson and Mr. Archer

Hind, and he tells us (p. vii.) that he has been "content to presume them". He is, of course, quite entitled to do so; but it gives an esoteric character to the whole discussion, and makes it very hard for any one who does not accept his premisses to estimate it fairly. It is surely time that the adherents of the Cambridge school of Platonic interpretation should show themselves more ready *διδόναι καὶ δέχεσθαι λόγον*. As it is, we get various applications of the fundamental hypothesis; but, if you ask any questions about that, *σεμνῶς πάνν σιγῇ*. We are confined to an examination of the hypothesis itself in the light of *τὰ συμβαίνοντα*, which is good Platonic method, and it will be seen that the conclusions of Mr. Gaye are such as to suggest the need for a change in the *ὑπόθεσις* itself.

It is unnecessary to discuss the first six chapters in detail. It is common ground that the doctrine of the immortality of the disembodied soul was first proclaimed by Plato. Any one who doubts this need only be referred to Rohde's *Psyche*. It is also common ground that this doctrine finds its fullest expression in the *Phaedo*, though I am quite unconvinced that the *Phaedo* is later in date than the *Republic*. The importance of this to Mr. Gaye's argument is that, according to him, by the time the *Phaedo* was written, though the *existence* of the ideas has never been doubted, "the possibility at least of our ever *knowing* them has been called in question" (p. 86). Plato's interest in the doctrine at this stage is, then, that it gives the philosopher his only chance of ever laying hold of true being. It will be noted that Mr. Gaye rejects Mr. Archer Hind's view that by the words *χωρὶς σωμάτων* (*Phd.* 76 C) Plato "simply means apart from the human bodies in which they now dwell". He maintains on the contrary (p. 97) "that the words mean exactly what they say, namely, that philosophic souls live on after death 'without bodies altogether'". This is a very old controversy, and the Church was quite as shocked by the doctrine as some modern Platonists have been.¹ In 114 *Ὁ ἄνευ καμάτων* was read for *ἄνευ σωμάτων* as early as the time of Eusebius in the interests of orthodoxy. But we shall see that Mr. Gaye makes Plato recant his heresy later.

In chapter vii. we come face to face with the main question "whether it is possible to discover a later theory of soul in conformity with the Later Theory of Ideas"² (p. 115). "What is required," we are told, "is to apply Dr. Jackson's results in another sphere and see how they will affect a side of Plato's philosophy to which they have not hitherto been extended" (p. 116). If "the idea is in reality an eternal mode of the thought of a supreme Mind—a *νόημα θεοῦ*, as we may call it," what will follow as to immortality? The result is startling. The particular soul must always be attached to a body. "Attachment to a body is, as it were, the price which soul has to pay for differentiation" (p.

¹ Cf. O. Immisch, *Philologische Studien*, ii., pp. 78 sqq.

² The use of capital letters here is instructive.

153). Finally, in the *Laws*, the Athenian Stranger "finds that what we mean by *ψυχή* is a particular kind of *κίνησις*," and we are told that this "supplements what we have already learnt from the *Timaeus*, where we are told that the *οὐσία*, or actual existence, of *ψυχή* is dependent on *σῶμα*; apart from *σῶμα*, *ψυχή* is merely a *λόγος* or abstract conception".

Here we must pause. Students of the *Timaeus* will have no difficulty in recollecting passages which say almost the exact opposite of this; they will hardly recollect this one. And, indeed, it is not there, though there is something like it in Mr. Archer Hind's translation. In *Tim.* 51 C, Plato asks:—

ἀλλὰ μάτην ἐκάστοτε εἶναι τί φάμεν εἶδος ἐκάστου νοητόν, τὸ δὲ οὐδὲν ἄρ' ἢν πλὴν λόγος;

This is correctly rendered by Stallbaum (*quum tamen id nihil sit nisi vana oratio et verba inania*?) and by Martin (*Est-ce faussetment que nous disons toujours qu'à chacun d'eux correspond une espèce intelligible, et ne seraient-ce là que de vaines paroles*?). The question is rhetorical. No Greek scholar ought to be in doubt for a moment as to the meaning of τὸ δὲ οὐδὲν ἄρ' ἢν πλὴν λόγος, and no Platonist should hesitate for a moment to answer the question by Παντὸς μᾶλλον δῖσχυριστέον εἶναι τι εἶδος ἐκάστου νοητόν. Mr. Archer Hind, however, translates "whereas it was nothing but a conception," and tells us in his note that "the question is in fact between Sokraticism and Platonism; that is to say, between conceptualism and idealism". The word *λόγος* has always been a stumbling-block in the interpretation of Greek philosophy.

But the greatest wave is still to come. Mr. Gaye has satisfied himself that the individual soul is always attached to a body in later Platonism, and that its immortality consists simply in its permanence through a series of transmigrations into the bodies of different animals. How will this square with the "Later Theory of Ideas," which is, as we know, "a theory of natural kinds"? Mr. Gaye asks, "What happens when a human soul, for instance, at its next incarnation enters into some other animal form? It would seem that such a soul must in such circumstances cease to represent one idea and begin to represent another" (p. 221). Mr. Gaye has only a tentative answer to this *ἀπορία*. It is to the effect that "Νοῦς thinks man-life and pig-life, but it does not determine itself directly into man-souls and pig-souls, but simply into souls". I do not find this very helpful, and it is not pretended that Plato says anything of the sort, so I will not discuss it.

The real merit of Mr. Gaye's Essay is that he does not conceal these difficulties, but states them boldly. I am not sufficiently at home in the atmosphere of the "Later Theory of Ideas" to have thought of this last and greatest *ἀπορία* for myself. It is, after all, most useful that those who are initiated should work out the theory to its logical results; but it is certain that, if the *συμβαίνοντα* continue to be of this character, the rest of us will be encouraged to attack the *ὑποθεσις* itself.

JOHN BURNET.

IX.—NEW BOOKS.

An Introduction to Systematic Philosophy. By WALTER T. MARVIN, Ph.D.,
Assistant Professor of Philosophy in Western Reserve University.
New York and London: The Macmillan Co. Pp. xvi, 572.

THIS is an interesting and very well-written volume; but its various parts are of unequal value.

Stating his entire agreement with the first chapter of Münsterberg's *Psychology and Life*, the author expresses his general point of view as follows: "I should call the main doctrine of my book a rationalistic idealism. By idealism I mean the doctrine that denies the existence of a transcendent world, and that, therefore, limits all problems to the world of experience. By rationalism I mean that our attempt to interpret the world must presuppose premisses or *a priori* truths about the world. Against naturalism I maintain that man's ideals can rightly lay claim to the same validity as his science; and in behalf of naturalism I attempt to justify the atomic mechanical interpretation of nature and indirectly of mind" (Pref., p. viii.). The course of treatment is subdivided as follows: Part I., Metaphysics: i., Philosophy of Nature (chaps. ii.-xiii.); ii., Philosophy of Mind (chaps. xiv.-xx.); iii., Ontology (chaps. xxi.-xxv., materialism, spiritualism, dualism and the problem of substance); iv., Cosmology (chaps. xxvi.-xxxi., pluralism, singularism, causation, panpsychism); v., Cosmogony (chaps. xxxii.-xxxv., creation, evolution, teleology). Part II., Theory of Knowledge: i., Nature of Knowledge (chaps. xxxvi.-xl.); ii., Validity of Knowledge (chaps. xli., xlii.); iii., The World as Pre-supposed in Knowledge (chaps. xliii.-xlvi.); iv., The Manifold Interpretation of the World (chap. xlviii.). Part III., The Philosophy of Religion (chaps. xlix.-li.). Part IV., Theoretical Ethics (chaps. lii., liii.). Part V., Aesthetics (chap. liv.). It will be seen that the book is excessively subdivided. The weakest part of the work consists of the first two divisions (chaps. ii.-xx.) of "Part I." These chapters are more likely to be perplexing and confusing than helpful to the beginner. The other parts of the book seem much more useful from the point of view of an "Introduction".

The centre of the difficulties that I find in Mr. Marvin's "Philosophy of Nature" consists in the position—whatever it may be—that he assigns to the mechanical theory. He admirably states the essentials of this theory and accepts it (with the implied finality of the distinction between primary and secondary qualities) as ultimate for science. This invites comparison with Lotze's position; but Lotze, professing to allow full validity to mechanism, cuts the ground from under it by his theory of the ideality of Space. The reader is left to guess what Mr. Marvin's view of Space really may be. Throughout these chapters the author seems to be alternately making and withdrawing concessions to mechanism, and the final result is uncertain. He does not directly deal with

the primary difficulty to be met by any one who holds to the primacy of mechanism: that the "actual concrete world" is neither described nor explained by the mathematico-mechanical theory. It is certain that we come to a complete stop when chemical affinity and secondary qualities are recognised as real; and there is no hint of how these may be explained or described in *merely* mechanical terms. The Conservation of Energy is treated as equivalent to the conservation of motion; but no explicit treatment is given of the conception of Energy itself. The extremely important subject of chapter xii. (Mathematics and Abstract Mechanics as *a priori* Sciences) should have had much fuller treatment; and the references given for reading are absurdly inadequate. I fear it must be said that Mr. Marvin's whole account gives not even the beginnings of an accurate idea of the present position of physical and mathematical science. Philosophers seem hardly to have realised the important fact that some of the ablest special workers in these branches of knowledge—Russell, Couturat, Ostwald, Duhem, Poincaré, to mention only these—have begun to devote themselves with concentrated energy to discussion of the epistemological and "methodological" aspects of the conceptions with which they have such an intimate practical acquaintance; and when compared with this work, what has hitherto passed for "Philosophy of Nature" seems really almost ridiculous.

We repeat however with pleasure, that the other portions of Mr. Marvin's book are well done, and introduce the reader skilfully to some of the most important philosophical problems of the present time.

S. H. MELLON.

Notes on German Schools. By W. H. WINCH. Longmans, Green & Co., 1904. Pp. 264.

This book on German Schools is written by one of His Majesty's Inspectors and is a good attempt to use the comparative method in order to facilitate improvement in the teaching processes. It does not claim to be an exhaustive treatise on German Education, but it has a distinct value of its own because the writer has confined himself to a definite task which he was well qualified to perform, and which he has taken pains to perform thoroughly. The book consists of two parts. The first sixty pages give some of the writer's general impressions on German Education, and a concise statement of the main facts regarding schools, teachers, methods and curricula as they presented themselves to the eye of an educational expert whose experience enabled him to compare them with the corresponding facts in the English system. The second part consists of a well-arranged and admirable series of notes of separate lessons on the chief school subjects given in schools of different types, and in classes of different grades.

These lessons illustrate the practical procedure adopted in the typical schools visited by Mr. Winch, in the teaching of Arithmetic, Reading, Writing, History, Geography, Grammar, Foreign Languages, Object Lessons and Science, Drawing, Physical Exercises and Singing. The special features of the method are in each case noted, and the author occasionally adds a word of criticism or makes a comparison with English methods.

It is interesting to find that as a rule object lessons as given in German Schools are not lessons in perception at all, but lessons in language, and that the teaching of Drawing and Elementary Science seems to be decidedly inferior to the teaching in England. The German teacher is

so thoroughly trained in the oral method of Question and Answer that he has reduced his procedure almost to a fine art, but he carries the method so far that all lessons tend to become mere exercises in language rather than progressive steps in the acquirement of knowledge and mental power. Our English methods at their best seem to be more effective in developing self-reliance and initiative—qualities which make good colonists and organisers. The German school-boy requires the continuous help of the teacher, the English school-boy is encouraged and expected to work alone.

Mr. Winch suggests that the abolition of individual examination in this country and the increase in oral teaching are tending to reduce the power of the average English boy to do things by himself. This would be a lamentable result of a wise reform, but surely it is not a necessary result.

It is a great matter that Mr. Winch is still able to say "that the English school-boy, both primary and secondary, is much more intellectually independent and can work better without the perpetual prompting and questioning of the teacher".

Just as a series of good photographs gives us a clearer idea of a geographical district than a long description, so the lucid and concise notes of lessons and teaching methods here arranged in order will enable many to realise the work of German schools and teachers almost as well as if they had visited the country themselves. The book will be found a real guide to the best practical methods of teaching.

JOHN EDGAR.

The Diseases of Society (The Vice and Crime Problem). By G. FRANK LYDSTON, M.D., Professor of Criminal Anthropology, Chicago, Kent College of Law, etc. Philadelphia and London: J. B. Lippincott Company, 1904. Pp. 626. Price 15s. net.

In this volume the author gives a somewhat generalised exposition of current ideas on vice and crime. The opening chapters on Social Pathology and the application of Evolution in relation to Criminal Sociology and Anthropology rely rather too much on "atavism" in the loose sense. A distinction is indicated, but not pressed home, between "degenerate" and "atavistic". Strictly, to say that a criminal propensity of any specific kind is atavistic is merely to say that a quality that appeared in the grandfather reappears in the grandson, but that is not in any sense an explanation. It had some explanatory significance so long as individual acquisitions were assumed to be transmitted; it has little or none now that the biologist looks on the somatic individual as simply a test sample of what the stirp may become. Consequently, these chapters and the whole volume so far as founded on this somewhat easy theory, are not convincing. But the practical parts of the book are lucidly written and show the sobriety of opinion that comes of extended experience. And the experience is American. The chapter on Anarchy in its Relations to Crime seems to include most of the criticisms made on the weak points of democratic administration in general and American democracy in particular. The suggested remedies include anti-trust law, intelligent selection of police officials, increased municipalisation of goods, regulation of immigration, etc. The sections on prostitution contain little that is new, but omit little that is accepted knowledge. The falling birth rate is met by this: "Better a single child, properly reared by a happy, contented mother, than a dozen ill-fed, unkempt, dirty, vicious

and half-baked hoodlums" (p. 361). The criticism of the conventional method of punishing crime and preventing prostitution is trenchant and on the whole persuasive. "The sexuality of the male has more to do with the primal cause of prostitution than has the degeneracy of the female" (p. 373). The practical hints on the treatment of sexual vice and crime are good. The chapter on Genius and Degeneracy contains many facts well arranged, but the authenticating references are rather few. A large number of photographs after the Bertillon method are the basis of a long chapter on the characteristics of the criminal. These photographs are excellent so far as they go, but a "control" series is wanted from absolutely normal persons, if there be any such. An indication of the author's "therapeutics of social disease" is that he regards the Elmira Reformatory as the "nearest approach to the ideal".

W. LESLIE MACKENZIE.

The Science of Peace: An Attempt at an Exposition of the First Principles of the Science of the Self (Adhyātma-vidyā). By BHAGAVĀN DĀS. London and Benares: Theosophical Publishing Society, 1904. Pp. 347.

This is the second instalment of a "scheme of metaphysic" by a Vedāntist (approximately, Pantheist), the first part having been published in 1900 as *The Science of the Emotions*. The author's style is lucid, vigorous and fascinating, and his tone modest and sympathetic. He has had the advantage, as he acknowledges, of suggestions from Dr. J. H. Stirling and Prof. J. E. McTaggart. The book is thrown into the form of the pilgrimage of a human mind from the restless miseries of perplexity and fear at the problems of existence to the realisation of his identity with the Absolute. This, as is well known, is the solution that has most largely availed to satisfy the Indian mind during some 1,500 years and more. The main interest in its re-telling to-day lies in the fact that the tellers have absorbed, with the inherited facility of ancient civilisations, a considerable amount of modern European philosophy, and eagerly turn it to account. The less strongly trained intellects read any or all of it that appeals to them into their own ancient literature. The more discerning draw interesting comparisons. Mr. Dās is among the latter. His chapter on Fichte and Hegel should prove as suggestive to English readers as to his fellow-countrymen. He holds that the former philosopher is virtually, if independently, in striking agreement with much of his own Advaita-Vedānta doctrine. We ask—Where then is Spinoza, who is only named in a note? It is possible that the accident of words, of language, the power of which bulks so large in this, as in all mystic philosophies, may have obscured, for one writer at least, the parallelisms between the two great Pantheistic systems. We cannot imagine Spinoza dwelling in austere rapture on the identity between his Self and the Absolute Self. And the evolution of the term 'Absolute' is post-Spinozistic. But if this Vedāntist writer were to read, for 'Deus,' not 'Self,' with its odious ethical implications, but his own 'Ātman,' akin in sense, derivation and æsthetic effect to Pnuma, he might have tarried long over the *Ethica*. But let him not hope, at this time of day, to attract the European mind by the childish esotericism of mystic symbols of sounds. We have at least got beyond the 'OM' stage of meditation. Neither Greek nor Buddhist tolerated it. Nor is it worthy of an alert intelligence like that of the author.

C. A. F. RHYS DAVIDS.

An Introductory Study of Ethics. By W. FIRE. New York and London : Longmans, Green & Co., 1903. Pp. xi, 383.

This little book is written rather as a guide to conduct, than as a contribution to moral theory. Ethics is defined as "a study of practical life in its more general aspects". Temperamentally, men fall into two classes, the one desiring an ideal manhood and the interests of humanity, the other desiring happiness or contentment and following self-interest. Ethical theories, accordingly, may be grouped under the two headings of Hedonism and Idealism; though there are, in fact, as many theoretical half-way houses as there are compromises in the individual character.

Hedonism, now, offers a clear, but relatively narrow, idealism, a relatively comprehensive but vague conception of the self and of social relations. There is, however, no necessary contradiction between clearness and comprehensiveness. From the metaphysical point of view, indeed, the two opposing theories are found to be complementary: if we generalise hedonism, it takes on an idealistic flavour; if we clarify idealism, it takes on an hedonistic meaning. More important for the author's purpose is the thesis that the two attitudes are not even incompatible in practice; the concluding chapters of the book seek to reconcile them in the statement that "the demands of morality are best satisfied by a course of behaviour regulated with a view to the maximum of sustained progress". The terms of this maxim are carefully defined, and its application is illustrated in a number of concrete cases.

The moralist by profession will hardly be satisfied with Mr. Fite's classifications. And even for the undergraduate student, and the 'thoughtful persons whose attitude towards philosophy is one of serious interest, yet at the same time somewhat sceptical,' the author has, in the reviewer's judgment, erred on the side of over-simplification. He should have borne in mind more constantly his own introductory statement that "the extreme positions are very rarely held".

P. E. WINTER.

Psychology: An Account of the Principal Mental Phenomena, with Numerous Examples. By A. COOK. New York: Hinds, Noble & Eldredge, 1904. Pp. xi, 386.

This book may be described as a collection of anecdotes, interspersed with careless and often inaccurate statements about psychology. The skin and muscles give rise to three kinds of sensation: pain, heat, and resistance or pressure (p. 1). Having assimilated this fact, we are warned (p. 3) that "feelings the opposite of these are included in the designations". Pleasure, then, becomes a sensation derived from skin and muscle; so does the opposite of resistance or pressure—whatever that may be. On page 10 it is stated that "as we have said, we taste nothing but sour and salt, bitter and sweet". This, however, has not before been said. Gems of style abound. "We, of a truth, with our vast quantities of sugar and sweetmeats, live in what was to primæval man the sweet by-and-by"; "Oysters know very little as it is: what would they know without some means of sensation?"; "Primarily, the conditions of memory are: (1) The person himself; (2) his circumstances; and (3) things in general"; "Handel's 'Messiah,' a musical epic, has been considered the best oratorio ever wrought out in the brain of man, the manuscript of which in the hand of the composer is still to be seen in Buckingham Palace"; "Other things than landscapes call out feelings of the picturesque, for example, cathedrals, markets, the character of a man and his style".

E. B. T.

Historische Untersuchungen über Kant's Prolegomena. Von BENNO ERDMANN. Halle a. S.: Niemeyer, 1904. Pp. 144.

Most students of Kant are acquainted with Prof. Erdmann's edition of the text of the *Prolegomena* published in 1878. In an elaborate Introduction, the editor sought to establish the view that the treatise in its present form was the result of a twofold "Redaction" on the part of its author, and believed himself able to distinguish the sections to be ascribed to each. In consequence of repeated complaints about the difficulty and obscurity attaching to the mode of writing followed in his chief work, Kant, according to this view, resolved, soon after the appearance of the *Critique* in 1781, to prepare a popular presentation of the main principles of his philosophy. The project, however, was never carried out; apparently not so much as a commencement was made. After a few months it was dropped in favour of another scheme, that, namely, of composing a short compendium or abstract of his system, "for the use, not of pupils, but of future teachers". The fulfilment of this latter design had almost reached completion when the Garve-Feder review of the *Critique* appeared anonymously in the Göttingen *Gelehrte Anzeigen* of 19th January, 1782. Then Kant became aware of the extent to which a misconstruction of his philosophical position was possible, and the discovery led to a further change of plan with respect to the little volume upon which he was engaged, as also to a corresponding remodelling of the sections he had ready for publication. By the end of August, 1782, the *Prolegomena* was substantially *druckfertig*, although it was not given to the public until the middle of the year 1783.

Such very briefly was Erdmann's theory of the way in which the *Prolegomena*, as we now have it, came to be written. In editing the text, he printed those passages which he regarded as the later insertions and additions, together with such as appeared to him to have been composed after the change of plan in January, 1782, in smaller type than the rest. The principal sections thus indicated were the whole of the preface, 3, parts of 4 and 5, the three *Anmerkungen* to 13, 27, 28, 29, 30, 31, 39, and everything after and including 57. Erdmann's theory gave rise in Germany to a good deal of discussion. It was disputed notably in an able Essay (which appeared originally in the *Altpreussische Monatsschrift*, xvi., 1, and was afterwards republished separately) by Dr. Emil Arnoldt, who contended that the alleged composite character of the *Prolegomena* could not be maintained on the ground either of internal or external evidence. Erdmann did not reply at the time, but after an interval of twenty-five years he has recently had occasion to go into the matter again by reason of the task entrusted to him of editing the *Prolegomena* for the Berlin Academy edition of Kant's Collected Works. The present monograph contains the result of his renewed investigation.

So far as the internal evidence is concerned, the author does not consider it necessary to undertake any fresh examination of the text. With a few minor modifications he adheres to the analysis made by him in 1878. He is here occupied almost exclusively with the external evidence, the materials of which have been greatly enriched by the three valuable volumes of Kant's Correspondence which Rudolf Reicke has edited for the Berlin Academy Edition. A further source of information made use of is the Correspondence of Hamann, particularly the letters addressed during the years 1781-1783 to Herder and to Hartknoch, then Kant's publisher. Erdmann does not claim, even now, to be in possession of a conclusive proof, but he is of opinion that the additional material supports and confirms his hypothesis to such a degree

that it may fairly be regarded as established. The evidence presented is, in fact, cumulative in character. All the passages bearing upon the subject in the sources mentioned are quoted and commented upon in three laborious chapters dealing respectively with Kant's original plan of a popular exposition of the doctrines of the *Critique*, with his later idea of issuing a short *Auszug*, and with the subsequent remodelling of the latter into the *Prolegomena*. Altogether, Prof. Erdmann's case seems a strong one, and he has, at all events, given us an interesting piece of original research throwing not a little light upon the line of thought that was occupying Kant's mind in the period between the appearance of the first and second editions of the *Critique*.

Incidentally, the author attempts to show from the Correspondence that in the *Erläuterungen* of Schulze, published in 1784, no portion of any unfinished work of Kant, done whilst the idea of a popular exposition was contemplated by him, could have been incorporated, as was suggested by Arnoldt in the Essay above referred to. Further, in an Appendix, Erdmann discusses and rejects the supposition of Vaihinger that an accidental misplacement of some pages of Kant's manuscript by the printer has occurred at the beginning of the *Prolegomena*, whereby a part of the passage dealing with mathematical judgments, together with the whole passage dealing with metaphysical judgments, has been transferred to § 4, although evidently belonging to the end of § 2. This appears to us the weakest portion of Erdmann's book, and Vaihinger's reply to his objection in the *Kantstudien* (ix., 539 sqq.) is certainly deserving of the reader's notice.

The perusal of this volume has occasioned in us a feeling of regret that Prof. Erdmann did not reproduce, in the *Anmerkungen* to the fourth volume of the Berlin Academy edition, the full text of the Göttingen review, so difficult now to obtain a sight of. This document, unimportant enough in itself, is indispensable for tracing the sequence of thought which led to the revisions in the second edition of the *Critique*, and to have made it accessible to Kantian students would have increased the value to them of the great undertaking now being carried out with such scholarly care and thoroughness.

G. DAWES HICKS.

Die buddhistische Philosophie in ihrer geschichtlichen Entwicklung. Erster Teil: die philosophische Grundlage des älteren Buddhismus. Von Prof. Dr. MAX WALLESEER. Heidelberg: Carl Winter's Universitätsbuchhandlung, 1904. Pp. 148.

It is to be regretted that this interesting and suggestive little work should have been cast in its present form. It consists partly in an attempt, formidable enough even to matured Indologists, to establish identities and historical sequences between ancient works in the Buddhist literatures of India, Ceylon, China, Japan and Tibet, partly in an inquiry into how far Buddhism, as revealed in its canonical and semi-canonical books, can be said to amount to a systematic philosophy. The testing measures applied are the attitude of Buddhist thought towards the problems of external reality, of the nature of the ego, and of personal responsibility as affecting future existence (commonly called Karma). It is evident that the *Grundlage* of any great movement of thought cannot be exhausted by these three inquiries, especially where, as in the present case, the documentary evidence is exceptionally rich. The theory of external perception is by no means the fundamental touchstone of ancient philosophising. This, however, cannot be maintained as emphatically

with respect to early Indian thought as it can be of Greece. The theory is felt after in the utterances attributed to the founder of Buddhism, not to say in records of an even earlier date. And the extraordinary acuteness of Buddhist thought for psychological analysis may well have conduced, as it did with modern British philosophy, to an earlier evolution of this particular problem. But early Indian thought was, like its Western sister, as much occupied with the question of the One and the Many. 'What is the One?' occurs more than once as a dialectic poser. And whereas the more generally favoured philosophy, opposed by Buddhism, was even then making for that *Advaita* (non-dual) pantheism elaborated later on as Vedāntism, Buddhism, from its more inductive and agnostic standpoint, dared to stop short at its analysis into a plurality of ultimate elements, and hereon to base its ideals of perfect insight, mental emancipation and altruistic devotion. Nor is any inquiry into Buddhist philosophy complete which glides over the remarkable pendant it affords to the slightly earlier or slightly later Heracleitean doctrine of all existence as process or becoming. Or again does scant justice to its emphatically reiterated affirmations of the law of causation as natural, universal and eternal.

The doctrine of the ego, on the other hand, is unquestionably the central point of early Indian speculation, and the author's section on the very remarkably Hume-istic stand taken with regard to it by Buddhism, which is good as far as it goes, might well have been enlarged, especially in the direction of comparative treatment. For the canonical books are rich in criticisms of contemporary speculation on the self or soul, with which the age was teeming, and which abound in early non-Buddhist literature. The limited space, however, to which the author has confined himself, added to the limited number of years during which he has specialised in philosophical history, have made it almost inevitable, in spite of his already remarkable erudition, that this first instalment of results should take the form, if not the title, of *Prolegomena* to a treatise on Buddhist philosophy. It is indeed better so, and *du reste* the work, as it is, is for Indologists a significant and promising symptom.

C. A. F. RHYS DAVIDS.

Der Gegenstand der Erkenntnis. Einführung in die Transzendentalphilosophie.

Von H. RICKERT, Professor an der Universität Freiburg in Breisgau.

Zweite verbesserte und erweiterte Ausgabe. Tübingen und Leipzig:

Verlag von J. C. B. Mohr (Paul Siebeck), 1904. Pp. viii, 244.

It would be difficult to speak too highly of Prof. Rickert's little work. It is probably as vigorous and subtle an exposition of the fundamental doctrine of neo-Kantian epistemology as is to be found anywhere, and, though necessarily largely polemical, is in all matters of taste and temper a model of what cultivated criticism should be. Just at the present moment, with 'Pragmatism' so much in the air, the re-issue of such a work in an improved edition is singularly opportune. For Prof. Rickert's position is very much of the nature of a compromise between the extreme doctrines of the Pragmatist and the Anti-pragmatist. On the one hand he strenuously upholds the "primacy of the practical reason," and his second chapter ("*Der Standpunkt der Immanenz*") may fairly be said to be fatal to the old realistic conception of truth as a copy of an extra-conscious reality, if any one still holds to that ancient formula. While in the third chapter (to my mind the best of the five into which the book is divided) it is shown by examination of the logical character of the judg-

ment that truth and reality really mean the system of judgments which we find ourselves under an *obligation* to affirm. Thus the author agrees with Pragmatism in finding the criterion of truth in a subjective *feeling* of necessity, and in putting *das Sollen* before *das Sein* in the logical order of concepts. At the same time he does not forget that what Kantianism maintains is the primacy of the practical *reason*, and no part of his book is more excellently executed than the refutation of the "relativist" denial of the existence of "absolute" truth. For the rest Prof. Rickert is in the main an orthodox Kantian, and as such will not allow that the validity of transcendent norms of judgment is any ground for the recognition of transcendent objects. All objects, in fact, are merely "contents of consciousness," and, therefore, purely "immanent"; the "immanence-philosophy" is only wrong because it proceeds to deny the reality of the transcendent norm. It follows that there can be no science of Metaphysics as distinct from *Erkenntnistheorie*. I own myself in doubt whether Prof. Rickert's argument is not affected by his acquiescence in an ambiguous term. Is any known object really adequately described as a '*Bewusstseinsinhalt*'? But I must not attempt a criticism which want of space would necessarily render inadequate of a piece of work it would be impertinence to treat perfunctorily.

A. E. TAYLOR.

Kants Rassen-theorie und ihre bleibende Bedeutung. Ein Nachtrag zur Kant-Gedächtnisfeier. Von Dr. THEODOR EISENHANS, Privatdozent der Philosophie in Heidelberg. Leipzig: W. Engelmann, 1904. Pp. 52.

This is a useful little monograph on Kant's treatment of the race problem and his attitude in regard to the theory of Evolution. Much of the material had, it is true, been previously gathered together by Fritz Schultze, to whose work on *Kant und Darwin*, published in 1875, Dr. Elsenhans, strange to say, makes no allusion. Still, there was ample room for a further study of a group of Kantian writings that hitherto have had but scant justice done to them. After discussing Kant's work as a scientific investigator generally, and especially his contributions to Anthropology, which he raised for the first time in Germany to the position of an independent discipline, the author considers in detail Kant's view of development, the significance he attached to the conception of "race," his theory of the origin of different races, and his notion of purpose or design in relation to the theory of races and to natural science in general. The Kantian Essays specially referred to are those entitled "On the Different Races of Men" (1775), "Determination of the Notion of a Human Race" (1785), and "On the Employment of Teleological Principles in Philosophy" (1788), all of them prior to the third *Critique* (1790), whilst the latter and the Lectures on Physical Geography (1822) are freely drawn upon for passages relevant to the subjects under consideration. Dr. Elsenhans endeavours to indicate how nearly Kant approached to modern doctrines, and thinks that were it not for the absence of such terms as "natural selection," "inheritance," etc., the fact would be perfectly obvious. The author is content, with one exception, to play the rôle of expositor. The only criticism attempted has reference to the necessity of conceiving life as the "limiting notion of mechanical explanation". Kant, it is contended, was not sufficiently in earnest with his dictum that in the interpretation of nature the mechanical explanation should be carried to the utmost extent of its availability. Otherwise he would have seen that the limit to mechanical explanation was not the border-line between the inorganic and the organic, but the

original arrangement of elements from which the world process as a whole is the outcome. In other words, if teleological principles are to be admitted at all, they must be valid for the universe in its entirety, and not confined to one department of it.

G. DAWES HICKS.

Das Seelenleben des Kindes. Ausgewählte Vorlesungen von KARL GROOS.
Berlin: Reuther und Reichardt; London: Williams & Norgate,
1904. Pp. 229.

This series of lectures, written in more or less popular form, offers what the author modestly describes as "glimpses" into child-psychology. The first and more general part deals with the current conceptions of the definition, scope, purpose and methods of the comparative study of childhood (pp. 1-72). In the second, more special part, a number of particular topics—Association, Memory, Imagination, Apperception, etc., are selected and discussed. As might be expected the treatment of these questions is both fresh and interesting. The work is much more than a contribution to, or even a systematic disquisition upon, child-study. Under each section there is given an analysis, always suggestive and sometimes original, of the mental processes concerned. Characteristic of this part of Groos' work is the rejection of hard and fast distinctions. Throughout, the governing conceptions are growth and evolution. There are no sharp lines of cleavage in mental life: Material and Synthesis, Association and Assimilation, Inherited and Acquired Characters, Play and Earnest, etc., each, apart from its congener or complement, exists for logical abstraction alone. As instances of delicate analysis I may refer to the sections on Recognition (p. 147 ff.) and on Judgment (p. 191 ff.). There occur also many practical suggestions towards the theory of education, as that on the importance of training the imagination in children (p. 128 f.) and that on the educative value of the play-illusion (p. 168 f.).

J. L. MCINTYRE.

Logik. Von Dr. CHRISTOPH SIGWART. Tübingen. Third edition. 2 vols.
Pp. xx, 498, and iv, 799.

Dr. Sigwart died a month before the publication of this third edition of his great work. He was engaged almost to the end in its revision, but owing to failing health was unable after reaching the middle of the second volume to make it as complete as he had intended to do. More especially he was unable to add an intended excursus on the conception of Causality arising out of controversies with Wundt in particular.

The final publication has been supervised by Dr. Heinrich Maier, who prefaces it with an interesting account of Dr. Sigwart's life and work. He tells us that amongst the author's papers are many completed treatises and parts of his lectures ready for the press, but that he exacted a promise that none of these should be published after his death. This is in keeping with his scrupulous care that nothing should appear under his name which had not received the utmost consideration he was able to give it; when the English version was prepared every page of it had to be submitted to his scrutiny twice over before he would allow it to pass. But this very conscientiousness makes us regret all the more that any contributions of his should be lost to contemporary thought.

One of the additions in the present edition which is of special interest just now will be found at the end of the General Introduction, in a note upon the limits of application of the terms true and false.

H. BOSANQUET.

Introduzione alla Metafisica: I. Teoria della Conoscenza. Di PIERO MARTINETTI. Torino, 1904. Pp. viii, 496.

A work of great ability and research, the conclusions of which can here be only very briefly indicated. The author is an idealist. He holds that the universal and fundamental form of being is spiritual being, *i.e.*, being in the form of a conscious act. Not only is the world given to us as a representation, a process of consciousness, but there is nothing else behind that process, no reality producing the representation in our minds; this is the very thing itself. Nevertheless the distinction between subject and object still remains valid: the one is the unifying synthesis, the other the multiple content of consciousness. This does not mean that reality is limited to my empirical self. It simply means that selfhood, reference to a central unity, is the form of all existence, while the contents of the synthesis are capable of indefinite expansion by the compounding and recombining of one unified group within another. Signor Martinetti, like Mr. Bradley, believes in degrees of reality; but I have not noticed that he associates that idea with Mr. Bradley's name, although he is evidently familiar with *Appearance and Reality* as also with Green's *Prolegomena*. His attention has not apparently been directed to the acute criticism of Mr. H. V. Knox on the new idealism. These feats of acrobatic metaphysics would inspire respect as well as wonder if their performers would condescend to explain one single law of nature, great or small, or to predict one single phenomenon, such as the elliptical polarisation of light. Schelling and Hegel tried something of the sort, but without any encouraging success.

Criticising other philosophers is a more congenial task nowadays; and a large part of this volume is devoted to a refutation of all the metaphysical systems from Plato to Rosmini. It is well done, though very tough reading, being, in my opinion, made unnecessarily hard to follow by the substitution of a supposed logical for the historical order of the systems, and also by an utter neglect of perspective, Rosmini's moonshine, for instance, being given an amount of space quite disproportionate to its importance in European thought.

Most people who care for metaphysics at all are chiefly interested in them through their connexion with religious belief, by way of criticism or of confirmation, light on scientific problems being, as I have hinted, not now forthcoming. In his next volume, dealing with Being, the author will perhaps define his position in this respect. It is not now perfectly clear.

A. W. BENN.

RECEIVED also:—

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 J. S. Engle, A.M., *Analytic Interest Psychology, and Synthetic Philosophy*, Baltimore, King Brothers, 1904, pp. xxvi, 295.
 James Douglas, *Theodore Watts-Dunton, Poet, Novelist, Critic*, Hodder & Stoughton, 1904, pp. xiv, 488.
 James Bryce, *Sociological Papers, with an Introductory Address*, London, Macmillan & Co., 1905, pp. xxiii, 292.
Annual Report of the Smithsonian Institution, Washington, 1904, pp. lxi, 875.
University of California Publications, Philosophy, vol. i. Studies in Philosophy prepared in commemoration of the seventieth birthday of Prof. George Holmes Howison; Berkeley, The University Press, 1904, pp. 262.

- Prof. J. A. Stewart, *The Myths of Plato*, London, Macmillan & Co., 1905, pp. vi, 532.
- Sir Arthur Mitchell, K.C.B., *About Dreaming, Laughing and Blushing*, Edinburgh and London, William Green & Sons, 1905, pp. 157.
- A. Wolf, M.A., B.A., *Studies in Logic*, Cambridge, The University Press, 1905, pp. xii, 164.
- G. H. Howison, LL.D., *The Limits of Evolution and Other Essays*, second edition revised and enlarged, The Macmillan Co., 1905, pp. xlviii, 450.
- Annual Report of the Bureau of American Ethnology*, Washington, 1899-1901, 3 vols.
- Jacques Loeb, *Studies in General Physiology*, Chicago, The University of Chicago Press; London, T. Fisher Unwin, 1905, part i., pp. xiii, 423; part ii., pp. xi, 425-782.
- Dr. L. Lefèvre, *Du Mode de Transmission des Idées*, Williams & Norgate, 1905, pp. 51.
- Arvid Grotenfelt, *Geschichtliche Wertmass-stübe in der Geschichtsphilosophie*, Leipzig, Teubner, 1905, pp. vi, 211.
- Adolfo Levi, *L'Indeterminismo nella Filosofia Francese contemporanea*, Florence, B. Seeber (no date), pp. x, 300.
- Atti del Congresso Internazionale di Scienze Storiche*, Williams & Norgate, 1904, pp. xvi, 266.
- Giovanni Marchesini, *Le Finzioni dell' Anima*, Bari, Laterza & Figli, 1905, pp. xiii, 299.
- Prof. Cesare Ranzoli, *Dizionario di Scienze Filosofiche*, Milan, Ulrico Hoepli, 1905, pp. viii, 683.

X.—PHILOSOPHICAL PERIODICALS.

REVUE PHILOSOPHIQUE DE LA FRANCE ET DE L'ÉTRANGER. Monthly, edited by Ch. Ribot. Felix Alcan, publisher, 108 Boulevard Saint Germain, Paris. January, 1905. **A. Fouillée.** 'Must Pure Practical Reason be Criticised?' **G. Spiller.** 'On Method in the Investigation of the Laws of Ethics.' **Vernon Lee.** 'Essay in Empirical Aesthetics. The Individual in the Presence of the Work of Art.' **G. Richard.** 'The Conflict between Sociology and Philosophical Ethics.' The *Revue Philosophique*, founded in 1876, enters with this number into the thirtieth year of its publication, and continues to maintain the high standard which it established from its inception under the editorship of the eminent psychologist, Prof. Ch. Ribot, who still remains at the helm. When the history of Contemporary French Philosophy shall be written, it will appear that the *Revue Philosophique* is closely bound up with the extraordinary revival of philosophical and psychological studies in France during the last three decades. The January number contains an article by M. Fouillée in which he attempts to show the insufficiency of Kant's Ethics. Kant refuses to subject ethical principles to criticism. *Sic volo, sic jubeo, sic pro ratione ratio ipsa.* "The moral law is thus the great exception to criticism: it cannot admit of any doubt, because if it were not its sole and unique support to itself, any other support having been previously removed by Kant, it would collapse without help or remedy" (p. 2). "Moralism, in my opinion, is only the anteroom of truth. Its supporters are content with showing that positive morals and the positive sciences of nature and of society are not sufficient to constitute a moral order. Hence they infer that such order has a separate independent existence. I submit that we must go farther, that we must found ethics on the principles and conclusions of integral science and integral philosophy" (p. 1). "Kant himself remarks: I hear it loudly proclaimed on all sides: Do not reason! The officer says: Do not reason, but do your drill; the chancellor of the exchequer says: Do not reason, but pay; the priest says: Do not reason, but believe. . . . It is so comfortable to remain in pupillage! Have I not got a book which provides me with wit, a spiritual director who provides me with a moral conscience, a doctor who prescribes to me my diet? I do not need to learn, provided I pay.—Words full of sense, but which may be turned against the moralism of Kant himself. The categorical Imperative also says: Do not reason, but obey. It is true that, according to Kant, he is reason itself, but as he only constitutes pure and formal reason, not the fulness of reason and of reasons, his orders are half 'clairvoyant' and half blind. He therefore remains subject to criticism" (pp. 18-19). "The main critical question which Kant ought to have asked, in ethics as well as in metaphysics, is the following: The *universality* of rational principles, and in particular of moral principles, would it not be simply the derivation and intellectual expression of an ineradicable instinct of intellect and will, or even better, of life?" (p. 20). The article of M. Richard analyses the conflict between

the "metamoral" system of ethics of Prof. Hoeffding and the purely positive and sociological system of De Roberty. February. **Ch. Richet.** 'Peace and War.' **Vernon Lee.** 'Essay in Empirical Aesthetics.' [Second and last article.] **Ch. Dunan.** 'Authority and Liberty.' **M. Halbwachs.** 'Needs and Tendencies in Social Economy.' Vernon Lee's two articles in the January and February numbers are an attempt at a purely subjective and impressionist aesthetic criticism. They are in the main a collection of notes taken in the great picture galleries, and describing the psychological attitude and conditions in the presence of the masterpieces of art. "In my opinion the true data of consciousness, the modes of psychical life, cannot be subjected to rigorous methods. We can only measure with precision the elements of our psychical states, and these elements never reveal themselves in their absolute purity and they lose their significance as soon as they are subjected to a method of isolation. In aesthetics especially we have to do with fusions, abbreviations and a synthesis of psychical states. And in order to understand aesthetic problems, we must begin, not with the elemental fact such as it has been isolated by analysis, but with the complex fact, which also reveals itself in experience. We must proceed not from the simple to the complex; but from the complex, intricate and often obscure data of reality and advance towards the simple but artificial result of analysis" (p. 47). March. **Kozłowski.** 'The Universal Regularity of Evolution and the laws of Nature.' **Ch. Richet.** 'Peace and War.' [Second and last article.] **G. Palante.** 'Friendship and Sociality.' **F. Paulhan.** 'Rational Beauty According to M. P. Souriau.' Prof. Charles Richet has been very closely identified for many years with the Peace and Arbitration movement in France and in Europe. In the two articles before us the distinguished physiologist gives us the philosophical foundations of his belief in peace and arbitration. He starts at the outset with the striking remark that whilst in the eighteenth century philosophers like Leibnitz and Kant took the lead in the movement "zum ewigen Frieden," in the nineteenth century philosophers have taken little interest in this vital question, and have been left behind by politicians and philanthropists. In his article on "Friendship and Sociality," Mr. Geo. Palante points out that psychologically friendship is essentially an "individualist" and not a social feeling, and "that it implies an intense feeling of individuality, a decided originality of the two 'egos' in presence and a higher type of egoism which separates itself from the commonplace surrounding sympathy" (p. 275). "There is no antagonism between friendship and egotism; whilst there is a very real antagonism between friendship and sociality" (p. 282). The same author, M. Palante, gives us in the same number an analysis of six recent volumes on Nietzsche, which have appeared about simultaneously in Germany, and which are a convincing proof of the extraordinary influence of Nietzsche on the present generation.

REVUE DE PHILOSOPHIE. 1^{er} Juillet, 1904. 'Sur le matérialisme scientifique,' by **Paul Vignon**, is the fourth and concluding article of a vindication of teleology in the organic world—elaborate and subtle, somewhat needlessly cumbered with technicalities. Among the *comptes rendus* there is one on a Freiburg dissertation, *De causa finali apud Anaxagoram, Socratem et Platonem*; another on M. Picard's *Comment traiter l'enfant à l'école*. M. Picard takes an optimistic view of boy nature, reminding one of Rousseau's *Émile*. It is the modern idea of self-realisation: but, the reviewer pertinently asks, are there not individual types of boy nature that want, not realisation, but reformation?

A theory of M. Chiapelli on a double redaction of Plato's *Theatetus* is exposed by **Auguste Diès**, and rejected as non-proven. **V. Bernies**, in reply to M. le Comte Domet de Vorges, once more urges the expulsion of *intellectus agens* from Neo-aristotelian philosophy. 1er Août, 1904. 'Object and Structure of Physical Theory,' by **P. Duhem**, a contrast between the French method of abstract reasoning and the English use of working models. 'The Psychological Phenomenon of Affinities' (natural likes and dislikes), by **R. de la Grasserie**. 'Aristotle and Plato According to Zeller,' by **Bulliot**. 'Was Aristotle acquainted with the (Platonic dialogue) Sophist?' by **C. Huit**. 'Physical Theory According to Descartes,' by **F. Mentré**. 'Abstraction,' by **J. Gardair**, a defence of *intellectus agens*. 1er Septembre, 1904. 'Object and Structure of Physical Theory, v,' by **P. Duhem**. 'Amplitude of Law,' by **C. Boucaud**. 'M. Séailles on Providence and Miracle,' by **G. Sortais**. 'Philosophers and Philosophy according to Plato,' by **H. Guyot**. Octobre, 1904. 'Physical Theory,' by **P. Duhem**. 'Providence and Miracle,' by **G. Sortais**. 'Creative Imagination,' by **P. Hermant**. Reviews of **A. Cresson**, 'The Morality of Speculative Reason'; **M. Séailles**, 'Affirmations of the Modern Conscience'; '*Revue de Métaphysique et de Morale*, Mai, 1904,' which number is wholly given over to the discussion of Kant. Novembre, 1904. **Gabriel Tarde**, 'The Notion of Chance in Cournot,' **J. Bulliot**, 'Aristotle and Plato according to Zeller,' **P. Duhem**, 'Physical Theory of Primary Qualities.' Accounts of the International Congress of Philosophy and of History of Sciences at Geneva (September), and of the British Association at Cambridge (August). **E. Peillaube** on colour sensations attaching themselves to sensations of hearing; also on Lévy-Brihl's Lectures at the Sorbonne on Hamilton and Mill. Janvier, 1905. **X. Moisant**. 'Philosophical Thought and Mathematical Thought.' [The one irreducible to the other.] **P. Duhem**. 'Object and Structure of Physical Theory: ix., Physical Law.' **Ch. Huit**. 'The Notions of the Infinite and of the Perfect.' **P. Vignon**. 'Biological Philosophy.' [A review of mechanical theories of biology.] **Comte de Vorges**. 'Abstraction, a Reply to V. Bernies.' [A defence of *intellectus agens*.] Reviews of *The Education of the Democracy, Teaching and Democracy*, pedagogical conferences at the School of *Hautes-Etudes sociales*. Février, 1905. **G. Vailati**. 'The Rôle of Paradoxes in Philosophy.' **X. Moisant**. 'Philosophical Thought and Mathematical Thought.' **Dr. Baltus**. 'Objections against the Theory of Neurone,' neurone being the one element supposed to constitute both the grey and the white matter of nerve tissue. **P. Vulliaud**. 'Ballanche and His System' of Social Palingenesis. Review of **Brunetière**, 'The Utilisation of Positivism,' as showing a way to faith; also of **Le Dantec**, 'Ancestral Influences'; also of **Jacoby**, 'Study of Selection in Man,' a pessimist view of the future of cultivated races. **E. Peillaube**. 'Object of Psychology': 'psychological life is quality, and quality only, without admixture of quantity'. 1er Mars, 1905. **Ernest Naville**. 'Presidential Address at the Geneva Congress.' ['I consider that all monism which, to affirm the unity of the universe, does not travel back to the act of a free Creator, is a false monism.'] **W. Kozłowski**. 'Wronski and Lamennais.' **L. M. Billia**. 'The Unity of Philosophy and the Theory of Knowledge.' **P. Duhem**. 'Physical Theory and Experience.' **Ch. Boucaud**. 'The Crisis of Natural Law.' [Natural law to be arrived at through a natural history of law.] Review of Henry Sidgwick's Lecture on the Ethics of Green, Spencer and Martineau. **A. Bazailias**. Thesis for Doctorate: '(1) Metaphysical Meaning of Music according to Schopenhauer; (2) Personal Life'

REVUE DE MÉTAPHYSIQUE ET DE MORALE. 12^e Année, No. 6, November, 1904. This enlarged number is devoted to the proceedings of the International Congress of Philosophy held at Geneva in September last. Six of the chief papers are printed in full, and critical accounts are given of the discussions in the various Sections. In the 'Actes du Congrès,' which are to be published shortly, only a brief summary will be given of the above articles, while the other addresses, and also the discussions, will be reproduced in their completeness. **H. Bergson.** 'Le paradoxe psycho-physiologique.' [The theory of psycho-physical parallelism involves a fundamental contradiction, and cannot be stated without destroying itself. Stated in idealist terms, it involves the contradictory assertion that the part is the whole; while, if stated in realist terms, it makes the equally impossible assertion that the relation between two terms is equivalent to one of them. Neither standpoint, however, is maintained in its purity, and the contradiction is concealed by a continual alternation between the two interpretations. This argument, which is developed in a most suggestive manner, with great subtlety, seems to have been very inadequately discussed. Doubtless the originality and boldness of Bergson's argument took his hearers rather by surprise. The remarks of Chartier, who reports the discussion (pp. 1027-36), are much more to the point.] **P. Boutroux.** 'Sur la notion de correspondance dans l'analyse mathématique.' [P. Boutroux, in opposition to Peano, Couturat and Russell, maintains the indispensableness of intuition in the development of our mathematical knowledge. "Entre le point de vue du logicien et celui du mathématicien, il y a une différence essentielle; le logicien ne voit dans la détermination des postulats qu'une opération préliminaire et immédiate, précédant le travail logique proprement dit; pour le mathématicien, au contraire, c'est précisément dans le choix des définitions et des postulats que réside la véritable découverte. C'est par l'introduction de notions nouvelles, beaucoup plus que par les transformations de symboles que les mathématiques progressent et progresseront" (p. 917 note). This general point of view is developed with special reference to the notion of correspondence. Couturat in his criticism, as reported by himself (pp. 1046-54), is not very convincing. Boutroux, however, rather gives away his case by implying acceptance of the Cartesian opposition between sense and understanding.] **H. Delacroix.** 'Sur la structure logique du rêve.' [Criticising the view that dreams are due to a rational construction exercised upon a chaos of detached images, Delacroix argues that such separation of the form and the matter is not justified by the facts. In dreams we find rather a multitude of psychical systems, which are not rationally connected with one another, but in each of which there is always a certain amount of order and unity.] **L.-Colonel Hartmann.** 'Définition physique de la force.' [The displacing of the notion of force by that of quantity of motion (*quantité d'action*) cannot be justified either from the mathematical or from the physical point of view.] **Xavier Léon.** 'Fichte contre Schelling.' [From 1801 onwards, all Fichte's principal writings and lectures were inspired by the sole aim of defending his 'Wissenschaftslehre,' and with it the critical point of view, against the philosophy of Schelling, which, while pretending to develop it, really destroyed it.] **F. Rauh.** 'Sur la position du problème du libre arbitre.' [Develops a pragmatist interpretation of the freedom of the will, and advocates a positive introspective method of dealing with the problem.] **Comptes rendus critiques des séances du congrès.** Livres nouveaux. 13^e Année, No. 1, January, 1905. **Leibniz.** 'Trois dialogues mystiques inédits. Fragments publiés avec une introduction par Jean Baruzi.' [The term 'mystical' is rather misapplied to these dialogues; and Baruzi's conten-

tion in his introduction that mysticism is the fundamental element in Leibniz's philosophy is not convincing. The first dialogue is an application in ethics of Descartes' epistemological method; the second and third are mainly theological. All three dialogues are slight, and the first alone is of special interest.] **G. Belot.** 'En quête d'une morale positive.' [A defence of the positivist attitude in ethics. The 'metaphysical' method is discussed at length.] **F. Evellin.** 'La raison et les antinomies (*suite*).'
[A continuation of the series from March, 1904. The present article treats of the antinomy of spontaneity and freedom.] **J. Weber.** 'Les théories biologiques de M. René Quinton.' [An excellent account of Quinton's interesting theories.] **P. Lacombe.** 'La représentation proportionnelle à propos du livre du M. P. Lachesnais.' Livres nouveaux, etc.

L'ANNÉE PSYCHOLOGIQUE (x^{me} année), publiée par A. Binet. Paris: Masson et Cie., 1904, pp. vii, 680. The present Year-book is divided into four parts: (1) Original Memoirs, pp. 1-210; (2) General Reviews, pp. 211-400; (3) Bibliographical Analyses, pp. 401-550; (4) Bibliographical Index, pp. 551-673. The first paper (**A. Binet**, 'La création littéraire') consists of a study in individual psychology, of which the subject is the well-known dramatic author Paul Hervieu. Part of a wider plan, sketched in an earlier number, and which it is intended to complete in later numbers, this study gives, according to Binet, insight into an almost perfect example of "completely rationalised humanity," in striking contrast to the emotional "inspired" type of which Daudet is an instance. The method was by interviews, for which the questions were carefully prepared beforehand, the replies being noted as nearly as possible verbatim. Hervieu's heredity, literary development, language and style, method of work, imaginative faculty, self-criticism, attitude towards the fictive characters of his dramas, his individualism, etc., are passed in review; and all give proof of the preponderance of the logical over the emotional in his mental character. **Lecaillon**, 'La biologie et la psychologie d'une araignée,' describes some experiments on the maternal instinct of *Chiracanthum carnifex*. In natural circumstances the mother remains in the closed nest with the eggs and young until the latter are able to protect themselves. A mother removed under such conditions readily adopts the nest of another mother; but after several days the latter still "recognises" her own nest when placed outside it, and attacks the intruder, who on her part seems "aware of her usurpation" and makes good her escape, if possible, without offering battle. The variations in this behaviour with different lapses of time are instructive. There is no recognition apparently by the mother of *individual* young ones. **Bourdon et Dide**, 'Un cas d'amnésie continue,' give a careful study of an extremely complex case. Without serious impairment of any of the senses, the patient showed (1) occasional lapse of the power to recognise familiar objects by taste or smell; (2) almost complete verbal blindness, without psychic blindness; (3) serious disturbance of stereognostic perception, and tactile asymboly; (4) almost no power of recalling events of the immediate past. Perhaps the last feature of the symptoms is the explanation of most of the others, as the authors suggest; when touching one part of an object the patient has already forgotten the impressions received from the others, hence is unable to reconstruct the image as a whole. **Binet** (p. 116) gives an account of the studies being undertaken by the Society for Child-Psychology in Paris. A special characteristic of the society, and an admirable one, is its organisation of "commissions" for the study of definite problems. **M. Michel** contributes a temperate estimate of *Herbert Spencer's* work and of his remarkable influence upon thought in France after 1870. The same writer also gives

a sympathetic study, and a touching picture of *Renouvier*. **Zwaarde-maker**, 'Sur la sensibilité de l'oreille,' offers a *résumé* of work done by the author and others, chiefly bearing on the extreme sensitiveness of the ear,—the upper and lower limits of tone-sensation, the number of vibrations sufficient to ensure perception of a tone (practically uniform throughout the scale in spite of the immense difference between the respective *rates* of vibration), the sensibility of the ear for spoken sounds, etc. At the close is a useful bibliography (p. 177). **Binet**, 'La Graphologie,' presents details of an experiment upon the question whether writing gives any trustworthy indication of the sex of its author. The conclusion is that even with experts there is a probability of error of 1-10th. There is, however, no doubt that writing does in some degree reflect the sex of the writer. A valuable addition in this number of the Year-book is a series of accounts by specialists of the progress made in various branches of science which stand in close relation to psychology; as—*Cytology* (Heneguy), *Physiology of the Nervous System* (Fredericq), *Anthropology* (Deniker), *Philosophy and Ethics* (Malapert); a *Psychological Chronicle* is also given, by M. de Varigny, and other *résumés* of work in pedagogy, abnormal psychology, etc.

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ARCHIV F. D. GESAMMTE PSYCHOLOGIE. Bd. ii., Heft 2-3. **R. M. Ogden**. 'Untersuchungen über den Einfluss der Geschwindigkeit des lauten Lesens auf das Erlernen und Behalten von sinnlosen und sinnvollen Stoffen.' [An extended investigation, made by means of nonsense syllables and of ordinary reading matter, of the characteristics of various rates of learning, with a view to the definition of the most favourable conditions. The author summarises his results under the headings: time of learning and number of repetitions; relation of learning and retaining; influence of type, and of mode of learning; influence of material and of rhythm. The results themselves are too detailed for quotation.] **O. Messmer**. 'Zur Psychologie des Lesens bei Kindern und Erwachsenen.' [Experiments with tachistoscopic and ordinary reading, made with a view to the diverging analysis of Erdmann and Dodge and of Zeitler. Subjective and objective types; word-form (visual and auditory-motor) and dominant letters; nature and number of errors, etc.] **R. Hohenemser**. 'Versuch einer Analyse der Scham.' [Analysis of modesty as a general state of consciousness, not necessarily conditioned upon sexual processes, but forming a special type of mental inhibition or paralysis ("psychische Stauung"), which may be variously resolved.] *Besprechungen*. [Meumann on Wundt's *Naturwissenschaft und Psychologie*.] *Berichtigung*. Bd. ii., Heft 4. **W. Wundt**. 'Ueber empirische und metaphysische Psychologie: eine kritische Betrachtung.' [Reply to Meumann's criticism of the 'Naturwissenschaft und Psychologie'.] **A. Fischer**. 'Die ästhetischen Anschauungen Gottfried Semper's und die moderne psychologische Aesthetik.' [The methodology and derivation of Semper's definition of the beautiful in art; his definition of beauty in art and nature; the validity and the psychological basis of artistic beauty; critical estimate of Semper's æsthetical ideas.] **J. Koehler**. 'Die simultane Farben- und Helligkeitskontrast, mit besonderer Berücksichtigung des sog. Florkontrastes.' [An elaborate study, qualitative and quantitative, of the phenomena of brightness and colour contrast, with especial reference to the conditions of Meyer's experiment. The opposing statements and results with regard to the effect of saturation depend upon different conditions of 'Auffassungswiese'. Neither the physiological nor the psychological explanation is

adequate to the whole body of facts.] Referate. **W. Ament.** 'Fort-schritte der Kinderseelenkunde, 1895-1903.'

ARCHIV F. D. GES. PSYCHOLOGIE. Bd. iii., Heft 1. **W. Specht.** 'Intervall und Arbeit: experimentelle Untersuchungen über den Einfluss des durch akustische Reize begrenzten Intervalls auf den zeitlichen und formalen Verlauf Körperlicher Arbeitsverrichtung'. [Reaction experiments by the ergographic method, with variation of the preceding interval. The results show marked individual differences.] **F. Schmidt.** 'Experimentelle Untersuchungen über die Hausaufgaben des Schulkindes: ein Beitrag zur experimentellen Pädagogik'. [An elaborate experimental study of home-work.]

WISSENSCHAFTLICHE BEILAGE zum 17ten Jahresbericht (1904) der Phil. Gesellschaft an d. Univ. zu Wien. Leipzig: Barth. Pp. 79. This volume consists of four papers read before the above society, on diverse subjects but of uniform excellence. 1. 'Ueber mehrdimensionale Räume,' **E. Müller.** [A non-technical account of the scientific conception of *n*-dimensional space, emphasising its rational character and its utility, without raising the metaphysical question of the "existence" of such spaces.] 2. 'Ueber den zentralen Sehakt,' **S. Exner.** [The extreme complexity of the visual perceptive process is illustrated from experiments by Hitzig and Imamura on artificially induced hemiamblyopia in dogs. Extirpation of part *either* of the sensory *or* of the motor visual zone causes a psychical defect, which however disappears after a time; when this has occurred, the operation on the *other* region, motor or sensory, of the same hemisphere, produces no further effect, but extirpation of the corresponding part of the other hemisphere results in *double* hemiamblyopia; again the disturbance, once disappeared, returns in full force when the *corpus callosum* is cut between the hemispheres; finally, in double hemiamblyopia an alternation occurs in the use of the right and left halves of the eyes after partial recovery. The explanation offered is partly psychical,—the neglect of low-value impressions and the reinforcement of interesting impressions by new associations; and partly physiological,—the cortex in the second hemisphere is made to function in new ways, and is therefore readily fatigued, hence the alternation of activity.] 3. 'Ueber die Notwendigkeit willentheoretischer Betrachtungsweise neben der erkenntnistheoretischen,' **R. Goldscheid.** [The main contention of this paper, which is marred by an over-liberal use of formidable terms, is the necessity of a theory of will alongside of the theory of knowledge, both being independent of psychology, which treats of the same objects but in a different aspect. We require a Critique of Will, on lines similar to those of Kant's Critique of Knowledge, to determine the conditions of the possibility of willing, and having as its outcome a critique of *Willenskraft*, *i.e.*, of man's ability not merely to *cognise* ends, but to *realise* them. From this point of view the author criticises the ideals or postulates of the ideological and of the materialist conceptions of historical process, those of the "British" school of national economy, of Socialism, utopian and scientific, of Neo-Darwinism, and of Nietzsche. Progress, purpose, design are categories of human thought, projected into nature just because of the *unpurposiveness* of the latter so far as man's interests are concerned. Man alone, in nature, shows a power of *active* adaptation, *i.e.*, the ability to modify his environment to fit his purposes. Goldscheid's theory, however, is not a mere "voluntarism"; logical and causal cognition are as necessary as teleological conation for human progress. Here Nietzsche was at fault, in spite of the great importance of his mission as an apostle of will.] 4.

'Der Wille zum Schmerz ; ein psychologisches Paradoxon,' **R. Eisler**. [A very suggestive paper, of which the conclusion is that pleasure and pain are not, as Eudæmonism insists, the sole goods or evils, but mere *indices* of truly objective, i.e., biological values. Since pain is a necessity of our present existence, and inability to feel pain would mean extinction, there have come to be desires or needs towards pain. The satisfaction of such needs is dependent not on the quality, but on the intensity of the feeling. The argument is largely illustrated from the facts of artistic sensibility.]

J. LEWIS M'INTYRE.

KANT-STUDIUM. Bd. ix., Heft 3 und 4. October, 1904. **B. Bauch**. 'Luther und Kant.' [A very lengthy statement and comparison of the main positions of Luther and of Kant in ethics and theology. Bauch seeks to show that Luther's moral and religious intuitions are developed into a rational system in the critical philosophy. The chief point of the comparison lies in the analogy between Luther's doctrine of justification by faith and Kant's teaching that nothing is good but the goodwill. The article is needlessly detailed and diffuse.] **A. Riehl**. 'Anfänge des Kritizismus—Methodologisches aus Kant.' [This summary account of the historical origins of Kant's philosophy forms the preface to the forthcoming second edition of Riehl's 'Der philosophische Kritizismus'. It does not seem to indicate any essential modification of the positions taken up in the first edition.] **H. Renner**. 'Reden zur Feier der Wiederkehr von Kants 100 Todestage.' [A review of the various centenary addresses given in the German Universities.] **A. Aall**. 'Zwei dänische Festgaben zum Kant-jubiläum.' **Sitzler**. 'Zur Blattversetzung in Kants *Prolegomena*.' [Fresh evidence is given by Sitzler in support of Vaihinger's theory that paragraphs 2 to 6 of section 4 of Kant's *Prolegomena* have been accidentally displaced, and should be printed as continuation of section 2. It is unfortunate that B. Erdmann, in editing the *Prolegomena* for the new edition of Kant's works, has not thought good to recognise, even in a note, the value of Vaihinger's theory. The facts here cited by Sitzler afford very conclusive confirmation of it.] Recensionen, Selbstanzeigen, etc.

RIVISTA FILOSOFICA. Anno vi., vol. vii., Fasc. v., November-December, 1904. **G. Zuccante**. 'Sul concetto del bene in Socrate.' [Concludes an essay having for its object to show that Socrates was not a utilitarian. But it is admitted that in defining man's good as the science of the good he falls into something very like a vicious circle. To find the ideal good in God was a task reserved for Plato.] **A. Gropalli**. 'La funzione pratica della filosofia del diritto (cont. e fine).' [Jurisprudence contributes together with other branches of social science to the art of statesmanship.] **F. Cantella**. 'Giacomo Leopardi e Max Stirner' [Leopardi was not only the great poet of the nineteenth century, but is destined to be the great philosopher of the twentieth century. Anticipating all Max Stirner's ideas, he has provided a remedy for them by pointing out the beneficent part played by illusion in life.] **E. Morselli**. 'Società e Ideale Etico.' [Points out, what in England at least is no secret, that Herbert Spencer's ethics, so far from having been determined by his theories of biological evolution, were themselves the determinant of his theory of evolution.] Rassegna Bibliografica, etc.

XI.—NOTES.

LEWIS CARROLL'S LOGICAL PARADOX (MIND, N.S., 3 AND 53, P. 146).

It is difficult to see how this argument, which is no paradox but a parallogism, should have been taken seriously, and that the fallacy in it should not have had its true character made clear nor have received the simple treatment of which it is capable. It is merely a question of language, and hardly needs the technicalities of Logic.

The premisses are:—

- (i.) Either Allen is in (first alternative),
or Brown is in (second "),
or Carr is in (third ").

- (ii.) If Allen is out Brown is out.

From (ii.) follows—

- (iii.) If Brown is in Allen is in.

Hence by (iii.) the second alternative in (i.) becomes—
Brown is in and Allen is in.

Thus—

- Either Allen is in (first alternative),
or Allen and Brown are both in (second alternative),
or Carr is in (third alternative).

Whence obviously—

- (iv.) Either Allen is in,
or Carr is in.

And the complete conclusion may be expressed thus:—

- Either Allen is in, Brown being in or out,
or Carr is in.

This is the direct argument, and it shows that Uncle's Joe's conclusion that Carr is always in, founded on a *reductio ad absurdum*, is false.

The fallacious *reductio ad absurdum* argument starts from the proposition, inferred from (i.)—

- (v.) 'If Carr is out, then if Allen is out, Brown is in.'

Now this means—

- 'If Carr is out and Allen is out, Brown is in,' and it is only with this meaning that it can be inferred from (i.); for one can only conclude from (i.) that Brown is in if Allen and Carr are both out.

But by (ii.), if Allen is out Brown is out.

We must add therefore to the consequent in (v.) this consequence of 'Allen is out'.

Thus (v.) becomes—

- 'If Carr is out and Allen is out, Brown is in and Brown is out'.

That is, the *conjunction* of Carr's absence and Allen's absence involves a contradiction.

Thus the conclusion is that the *conjunction* of Carr's absence and Allen's absence is impossible, not that Carr's absence is impossible. This is the true *reductio ad absurdum* argument. The false *reductio ad absurdum* which constitutes the supposed paradox, concludes that Carr's absence is impossible. It would necessitate, of course, if consistent, that Allen's absence was also impossible.

The false *reductio ad absurdum* depends on a mistake about the meaning of proposition (v.): 'If Carr is out, then, if Allen is out Brown is in,' which is interpreted to mean that the proposition 'If Allen is out Brown is in' is a consequent of the assumption 'Carr is out'. This is a mere verbal fallacy.

It is clear that whatever consequent is stated in (v.) is one which is affirmed as necessarily valid only at the times when Carr is out and at no other times. (It is not affirmed that 'if Allen is out Brown is in,' or 'Allen's absence necessitates Brown's presence,' is a rule which is valid at all times, but that Allen's absence necessitates Brown's presence only at the particular time when Carr is out. For if Carr is not out it is not necessary that Brown should be in even if Allen were out, indeed the other premiss shows it would be necessary Brown should not be in.) But the proposition 'If Allen is out Brown is in' is a universal proposition which if valid at any time is valid at all times; it represents a rule which is always valid. It cannot, therefore, be a consequence of Carr's being out, necessarily valid only at the time when Carr is out. In fact the proposed interpretation amounts to the absurd statement: "The rule 'If Allen is out Brown is in,' which if valid at all must be valid at all times is only necessarily valid at the times when Carr is out".

The fallacy then is a mere verbal one, caused by a misunderstanding of what is exactly meant by saying that the proposition: 'If Allen is out Brown is in' is a consequent of the proposition 'Carr is out'.

The fallacy in any case is merely a verbal one. The attempt to solve the 'puzzle' in the January number of MIND fails in all points. The writer thinks the whole mistake ('whole root of the matter') lies in making 'Carr is out' antecedent to 'If Allen is out Brown is out'. But it is the writer who is in error. The kind of 'antecedence' meant is familiar and legitimate. Mr. Dodgson's argument makes no wrong use of it and is, so far, quite sound. Further, the writer, after saying that the supposed wrong antecedent is the *whole* root of the matter, does not attempt to prove this, but goes off somewhat inconsistently to prove that something else is wrong. Here again a serious mistake of principle is made accompanied by an impossible example, which would involve a misunderstanding of the simple elements of every *reductio ad absurdum* proof. These mistakes need not be discussed, for it is reasonable to suppose they are slips, and that the writer, on reflexion, will see they are. It is curious what slips can be made in formal reasoning. No one seems safe from them.

W.

MR. BRADLEY'S DILEMMA.

In a note at the end of the last number of MIND Mr. Bradley asks a question which I am glad to answer again, since he now admits that his acquaintance with my previous answers is defective. Why on such a basis he thought it wise to attack the view does not appear.

However, he asks whether I do or do not hold that no positive doctrine in philosophy is theoretically indisputable. Yes I do, but only if to complain of tautology in a so-called positive doctrine is a way of 'theoretically disputing' it. I admit that a tautologous statement makes no assertion, and is therefore not open to the kind of attack to which only assertions are liable; it cannot be called *false*. Nevertheless the condemnation of it as empty verbiage is complete enough to satisfy all my disputatious desires. And I hold, further,—not as an unquestionable truth, but as a reasoned opinion which I should like to see directly met and questioned—that any statement which does convey an assertion may need correction to an extent which no wisdom before the event can determine.

It is clear that these two points constitute an essential difference between our modern undogmatic kind of 'scepticism' and Mr. Bradley's cut-and-dried notion of what 'scepticism' is compelled to be. We do not attempt to *deny* inapplicable axioms, but we complain of their lack of meaning and value; and we do not claim for our view any other presumption of truth than what may come from its being supported by reasons which no one has yet even attempted to face and overthrow. So long as this position continues the view remains uncorrected, whatever its errors may be; and, while it thus holds good, what matter whether one of its champions is 'self-elected' or elected by some other process not yet invented in philosophy? The question how far the view is true seems to me prior to the question whether this or that person ought to express it,—if indeed one can raise an interest in the latter question at all.

A recent account of the reasons on which the view is based is given in my book on *The Use of Words* (especially § 51), but I shall be glad at any time to supplement them so far as their defects of expression—when these are pointed out—may require. And I shall even be glad to modify the main view itself when any one suggests a reason for doing so. If our opponents' position were strong this ought to be an easy task for them; as things are, their leader's continued preference for imaginary issues compels one more and more to suppose it weak. Perhaps some other member of his party will now volunteer? For though Mr. Bradley is evidently sincere in regarding the discussion as mainly a personal matter, there is no reason why the rest of us should do so.

In conclusion, I am glad to note that Mr. Bradley still thinks it better not to mention what the phrases were which led him to fancy that I regard Mr. Schiller's view as assured beyond the need of further improvement; and he will, I hope, now be able to see that my scepticism is not of a kind that precludes a strong 'benevolent interest' in this new constructive attempt. The question remains how far the pragmatist method will continue to fulfil its promise. Will it help us not only to growtired of empty oracles, but also to make other movements forward?

ALFRED SIDGWICK.

NOTE CONCERNING THOUGHT AND REALITY.

It may be worth while to explain how it is that, to a physicist, even though he be unsmitten with any taint of solipsism, a well-elaborated scheme which is consistent with already known facts necessarily seems to correspond, or have close affinity, with the truth. It is the result of experience of a mathematical theorem concerning unique distributions. For instance, it can be shown that in an electric field, however com-

plicated, any distribution of potential which satisfies *boundary-conditions* and one or two other essential criteria must be the actual distribution; for it has been rigorously proved that there cannot be two or more distributions which satisfy those conditions, hence if one is arrived at theoretically, or intuitively, or by any means, it must be the correct one; and no further proof is required.

One method of constructing a theory is by the use of analogies and working models: of which it is a commonplace to say that, however good they may be, they must fail in representation at some stage, or else they must be no analogy but the thing itself. This making or imagining of models (not necessarily or usually a material model, but a conceptual model) is a recognised way of arriving at an understanding of recondite and ultra-sensual processes, occurring say in the ether or elsewhere. As an addition to evidence derived from such experiments as have been found possible, and as a supplement to the experience out of which, as out of a nucleus, every conception must grow, the mind is set to design and invent a self-coherent scheme which shall imitate as far as possible the results exhibited by nature. By then using this as a working hypothesis, and pressing it into extremes, it can be gradually amended until it shows no sign of discordance or failure anywhere, and even serves as a guide to new and previously unsuspected phenomena. When that stage is reached it is provisionally accepted and tentatively held as a step in the direction of the truth, though the mind is always kept ready to improve and modify and enlarge it, in accordance with the needs of more thorough investigation and fresh discovery. It was so for instance with Maxwell's electromagnetic theory of light; and there are a multitude of other instances.

In the transcendental or ultra-mundane or super-sensual region there is the further difficulty to be encountered, that we are not acquainted with anything like all the boundary conditions, so to speak; we only know our little bit of the boundary, and we may err egregiously in inferring or attempting to infer the remainder. We may even make a mistake as to the form of the function adapted to the case. Nevertheless, there is no better clue, and the human mind is impelled to do the best it can with the confessedly imperfect data which it finds at its disposal. The result therefore, in this region, is no system of definite and certain truth, as it is in the domain of Physics; but emerges either in suspense of judgment altogether, or else in a tentative scheme or working hypothesis, to be held undogmatically in an attitude of constant receptiveness of further light, and in full readiness for modification and improvement.

OLIVER LODGE.

EXISTENTIAL IMPORT.

May I ask the Boolean logicians who still maintain that their formula ($0A = 0$) is necessarily true, whatever the class A may be, to point out the error (if error they find) in the following reasoning?

According to their symbolic conventions, the statement ($XA = X$) asserts that "Every X is A," whatever X and A may represent. By their conventions also the symbol 0 represents *non-existence*. Let A represent *existent*. It follows that the statement ($0A = 0$) asserts that "Every *non-existence* is *existent*," an assertion which is self-contradictory. Hence, the statement ($0A = 0$) is not always true for all values (*i.e.*, meanings) of A.

Of course, the formula ($0A = 0$) holds good in mathematics for every number or ratio A ; as, for example, ($0 \times 2 = 0$). But then, in mathematics, ($0 \times 2 = 0$) does *not* assert that "Every 0 is 2".

H. MACCOLL.

MIND ASSOCIATION.

The following have joined the Association since the printing of the last number:—

Calkins (Miss Mary Whiton), Newton, Mass.

Turner (Dr. E. L. D.), Providence, Rhode Island.

Warren (Mrs. Fiske), Oxford.